Biotech Guide Baden-Württemberg

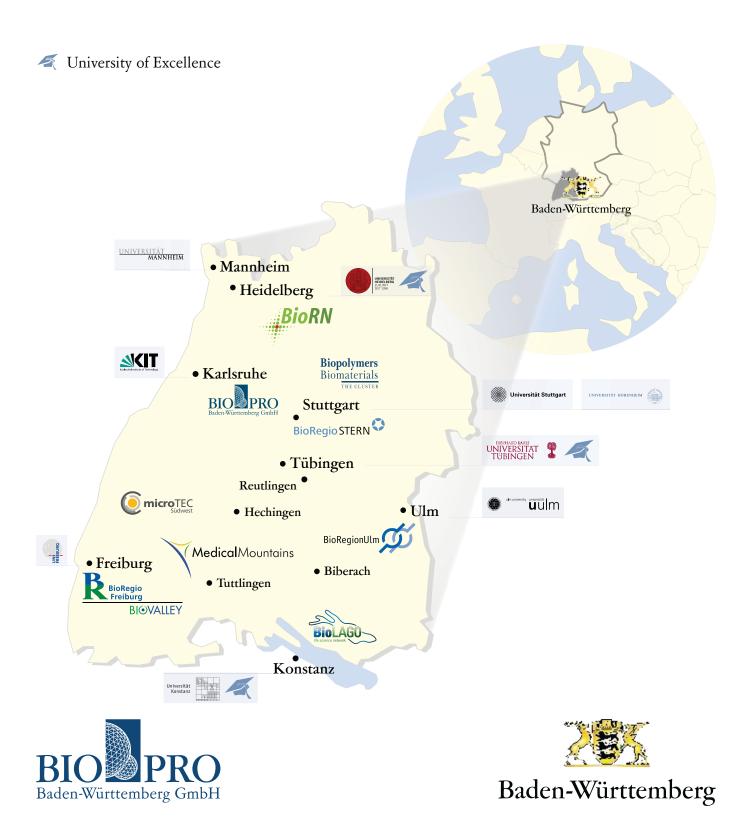
Biotech Companies in the South-West of Germany







Baden-Württemberg's Centers of Excellence



Contents



Your Guide to the Biotech Industry of Baden-Württemberg	2
Fields of Action	19
Company Profiles	27
Biotech Company Overview	145
Imprint	153

Reference BIOPRO Baden-Württemberg

Foreword



Dr. Ralf Kindervater CEO BIOPRO Baden-Württemberg GmbH

Biotechnology has come of age. As a crosssectoral technology, biotechnology contributes to further developments and innovation in the traditional sectors "pharmaceutical industry" and "medical technology". This process will continue and is much more advanced in the pharmaceutical industry than in the medical technology sector. The red biotechnology sector, the pharmaceutical industry and the medical technology sector together form what are known as the healthcare industries which, as manufacturing sectors, are an important part of the healthcare industry as a whole. Further cooperation between the three sectors is expected to provide additional impulses for innovative products and services.

The Baden-Württemberg government has recognised this potential and has expanded the activities of BIOPRO Baden-Württemberg. In future, we will serve as a central point of contact for all sectors within the healthcare industries. Today, it is no longer just a case of informing the public about the innovative power of biotechnology and increasing public acceptance for biotechnology, but also about analysing the problems of the entire healthcare industry and developing measures to strengthen the industry in Baden-Württemberg in close cooperation with industry associations. Such action is necessary in view of the fact that the healthcare industries – the red biotechnology sector, pharma industry and medical technology sector – face fierce international competition.

In the field of bioeconomy, the process of integrating biotechnology into the application sectors is still in its infancy in Baden-Württemberg. The major focus is still on laying research foundations. As a state-wide agency, it is our task to inform industry and society of the new possibilities and to develop perspectives. This creates the unique chance to resolve in a "living lab" the chicken-egg dilemma between product development and market. Many ideas related to the field of bioeconomy such as the manufacture of biobased plastics are being developed comparatively slowly as demand is not yet high enough. On the other side of the coin, the market is underinformed about the possibilities and new materials within the bioeconomy and is therefore not yet driving the development of innovative products and services forward. However,

people's growing sustainability awareness is leading to a change. At the same time, knowledge has increased considerably and the industry is now aiming to become not only sustainable, but also better. The industry's goal is not only to advance materials and processes that are based on new renewable resources and are on the point of replacing those made from fossil materials, but also to produce materials with new, improved properties. Another effect is that completely different economic systems that return to focussing more effectively on regional substance flows can be developed. This also contributes to sustainability.

As a cross-sectoral technology, biotechnology remains of particular importance. At present there is hardly any problem in the fields of health, environment, climate, food and energy that cannot be solved sustainably with biotechnology.

According to our research, Baden-Württemberg is currently home to 159 active biotechnology companies. In 2010, Baden-Württemberg biotechnology companies generated taxable revenues of 3.5 billion euros with 21,669 employees subject to social security deductions. These figures are the result of an analysis carried out by the Baden-Württemberg Statistics Office on





behalf of BIOPRO; the survey takes into account classical biotechnology companies as well as biopharmaceutical manufacturers and companies active in the fields of bioinformatics, diagnostics and analytics and using state-of-the-art biotechnology methods. 123 datasets of companies who had previously submitted information to the Baden-Württemberg Statistics Office were included in the survey; the number of non-existing records was not estimated. The analysis showed that the sector was dominated by micro and small companies; 98 companies, i.e. around 80% of all biotech companies, employed fewer than 50 people. Companies with more than 250 employees generated around 87% of overall taxable revenues. The cumulated revenues of smalland medium-sized companies, i.e. those with up to 250 employees, amounted to around 441 million euros in 2010. Compa-

Fields of activity:



Business development support





Area and cluster development



Rusiness



Public relations work

nies with up to 50 employees generated around 25% percent of this amount in 2010.

The present BiotechGuide Baden-Württemberg provides comprehensive information about biotechnology companies in Baden-Württemberg. It provides customers, cooperation partners, investors and other people interested in biotechnology with information that facilitates the search for and identification of suitable cooperation partners in the region.

I hope that you will find this information useful. Please do not hesitate to contact us should you need further assistance or have any queries.

With best wishes, Dr. Ralf Kindervater, CEO BIOPRO Baden-Württemberg GmbH

Reference BIOPRO Baden-Württemberg

Foreword

Demographic change, social inequality, energy- and resource scarcity, climate change: Baden-Württemberg is excellently positioned to find answers to these major 21st century challenges, and at the same time secure for itself competitive advantage.

Baden-Württemberg is the most innovative region in Europe. There is virtually no other European region where so much money flows into research and development as in Germany's southwest. Baden-Württemberg is a pretty successful competitor for research funds. It obtains a large number of European Research Council grants and has achieved best results in the German governmental Excellence Initiative.

The Baden-Württemberg government contributes to consolidating this strong



Nils Schmid, MdL Deputy Minister President and Minister of Finance and Economics of Baden-Württemberg

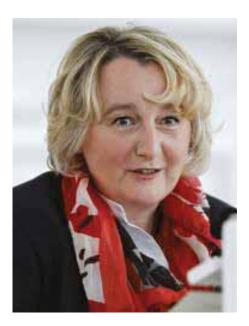
position by creating the right conditions for effective research institutions and innovative companies as well as strengthening the cooperation between science and industry.

The Baden-Württemberg government gives great importance to promoting biotechnology, as pharmaceutical technology and biotechnology have the potential to generate huge progress in the areas of medicine and therapy. Moreover, biotechnology provides solutions that contribute to avoiding the use of animals for the testing of pharmaceuticals.

Biotechnology will also play a key role in the transition from fossil to renewable energy resources. Biotechnology is key in the non-polluting and resource-saving conversion of raw materials. Research must

lay the foundations for such applications. The Ministry of Science, Research and the Arts launched a bioeconomy initiative in spring 2012 to support the work of Baden-Württemberg research institutions. At present, bioeconomy is mainly researched at universities, but we expect a larger number of companies to become involved in the issue as a consequence of the drive towards sustainable production processes.

Courageous entrepreneurs who turn innovative ideas into businesses are an indispensable part of a dynamic company landscape. Here too, Baden-Württemberg is breaking new ground with a special start-up initiative: EXI start-up vouchers, which are funded by the Baden-Württemberg Ministry of Finance and Economics, enable young entrepreneurs to make use of extensive coaching



Theresia Bauer, MdL Minister of Science, Research and the Arts of Baden-Württemberg

opportunities. The VC-BW Netzwerk für Beteilungskapital draws the attention of international investors to high-tech startups in Baden-Württemberg.

And last but not least, BIOPRO Baden-Württemberg GmbH: An institution that carries out extremely valuable work. The agency, jointly financed by the Baden-Württemberg Ministry of Finance and Economics and the Ministry of Science, Research and the Arts, supports companies and research institutions, represents the state on the national and international level and provides important impulses for the further development of the state's scientific and economic activities, particularly in view of its new focus on the healthcare industries and the bioeconomy in 2013. We would like to express our immense gratitude to BIOPRO for the work they do.

See BIOPRO Baden-Württemberg Ser



BIOPRO

Baden-Württemberg GmbH Breitscheidstr. 10 D-70174 Stuttgart Phone: +49 (0) 711/21 81 85 00 Telefax: +49 (0) 711/21 81 85 02 info@bio-pro.de www.bio-pro.de

Contact person:

Dr. Ralf Kindervater

Employees: 12

Services:

- Public relation work
- Area and cluster development
- Location marketing
- Business development support
- Innovation support
- International networking
- Business start-up services

The BIOPRO Baden-Württemberg GmbH represents Germany's best performing state in the biotech/life sciences sector. As a 100 % stateowned, non-profit organisation, BIOPRO Baden-Württemberg GmbH promotes biotech companies in all fields of application of modern biotechnology in Baden-Württemberg. BIOPRO promotes and supports the two strategic priorities "health" and "bioeconomy" by targeting areas such as biobased materials, biomedical engineering, environment, bioenergy and biopharmaceuticals.

Specific measures to promote the economy, location marketing, and broad public relations work are the main focus of our activities. In addition, our task is to promote and market science and research resources from universities, technical colleges and research institutes. With strong competences and direct contact with experts in the Baden-Württemberg-based network, the BIOPRO Baden-Württemberg GmbH is available as the primary contact for companies in all phases of development – from the foundation to financing or recapitalisation.

International relations to biotechnology clusters are being formed and used to make Baden-



Württemberg and its research institutions, technologies, and companies known around the world. With its Internet portal, the BIOPRO Baden-Württemberg GmbH provides current information and comprehensive background knowledge on biotechnology and the life sciences for target groups such as science, industry, culture, and the media. You can find the Internet portal at www.bio-pro.de.

The activities of the BIOPRO Baden-Württemberg GmbH significantly strengthen the science and business location of Baden- Württemberg. The aim is to start a movement which will allow all companies in the state to position themselves internationally and generate the best possible growth in synergetic surroundings.



Baden-Württemberg International -

Your one-stop agency on the way to success. Baden-Württemberg International (bw-i) is the competence centre for the internationalisation, promotion and development of business, science and research of the State of Baden-Württemberg. We lend support to domestic and foreign companies, clusters and networks, research institutions and universities by serving as the central first-point-of-contact in all questions relating to internationalisation.

Baden-Württemberg: Where ideas work.

There are many good reasons why Baden-Württemberg is a leading business location within Europe:

- Attractive market, strategically located for expansion within the EU
- Innovation region No. 1 in Europe
- Networked business structure for innovative industries
- Highest manufacturing density of any German state
- Number one export state among the noncity states of Germany
- Largest investor in research and development among German states
- One of the highest densities of research facilities and number of patents among German states
- Highest percentage of employees working in high-tech industries in Germany
- Lowest unemployment rate in Germany
- Excellent quality of life

Our Support Services

Settling in a new region involves having to deal with a wide variety of questions and obstacles. Baden-Württemberg International (bw-i) supplies the answers and helps you overcome the obstacles – quickly and easily, based on local expertise and knowledge.

- Provision of general information on Baden-Württemberg as a location for business and science, as well as specific location and structural data.
- Supply of general information on the legal framework and social insurance.
- Identification of suitable business and scientific partners for your company.
- Identification of potential sites and organization of site visits in cooperation with regional and local business-promotion agencies.
- Support with administrative procedures.
- Gateway to all actors in the field of business promotion and development, such as technology-oriented industrial institutions and sector-specific networks.



Baden-Württemberg

International Agency for International Economic and Scientific Cooperation Haus der Wirtschaft Willi-Bleicher-Str. 19 D-70174 Stuttgart Phone: +49 (0) 711/2 27 87 0 Telefax: +49 (0) 711/2 27 87 22 info@bw-i.de www.bw-i.de

Regional office in: Nanjing, Province of Jiangsu,

Employees: 55 employees

Business Units:

PR China

- Branches, Technologies and Innovation
- Science, Research and the Arts
- International Economic Relations
- International Projects
- Business Location

Baden-Württemberg

See BIOPRO Baden-Württemberg 🛩



BioRegion Freiburg

c/o Technology Foundation BioMed Freiburg Rathausgasse 33 D-79098 Freiburg Phone: +49 (0) 761/38 81 12 01 Telefax: +49 (0) 761/38 81 12 99 michael.richter@fwtm.de www.bioregion-freiburg.de

Contact person:

Dr. Bernd Dallmann Dr. Michael Richter

Production range/Services:

- BioTechPark Freiburg with lab and office space for biotechnology companies
- Coordinating and networking
- Support in economic development
- Consulting

Fields of action:

- Laboratories
- · Biotechnology services
- Biotechnology location

BioRegion Freiburg – a dynamic region within the BioValley

The BioRegion Freiburg is a partner in the tri-national BioValley network which pools the biotechnology potential of the centres of Freiburg (D), Basle (CH) and Strasbourg (F).

The region is known for its excellent and highly diverse research and company landscape. This takes in the University of Freiburg, with its unique Faculty of Engineering, one of Germany's biggest university hospitals, the Max Planck Institute for Immunobiology, the Tumor Biology Center as well as five Fraunhofer Institutes, including the Fraunhofer Institute of Physical Measurement Techniques, which works on bioanalytics.

"Centers of Excellence" have sprung up in the areas of biomimetics, cell and developmental biology, immunology, oncology, nanotechnology, plant biology, tissue engineering and systems biology as well as neurotechnology. Particular mention should be made of the high-performance technology transfer from the University of Freiburg, whose portfolio takes in all the eminent high-tech companies. With more than 100 biotech companies, including 40 which are R&D companies, the BioRegion Freiburg is one of the most dynamic German biotech regions.

The Technology Foundation BioMed Freiburg was set up in 1996 as a central network for the region by political, research and economic interests with the aim of creating secure jobs. The Foundation also manages the German BioValley coordination. The members of



the Foundation are the City of Freiburg, the University of Freiburg, the Chamber of Industry and Commerce Southern Upper Rhine, the Association of Industrial Enterprises Baden e.V., the Sparkasse Freiburg – Nördlicher Breisgau and the Chamber of Handicrafts of Freiburg. The board of management is located at the economic development agency of the city of Freiburg.

As the central coordination point for the BioRegion Freiburg, the Technology Foundation Freiburg offers a broad range of services for example

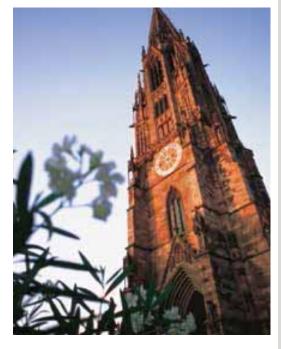
- Advice in all matters regarding business foundation and settlement
- Provision of contacts to financial service providers, authorities etc.
- Location marketing
- Management of the BioTechPark Freiburg
- Support in finding cooperation partners.

The regional private equity company of the Sparkasse Freiburg – Nördlicher Breisgau is also highly committed to the field of biotechnology.

BioTechPark Freiburg – a launching pad for biotech companies

The Technology Foundation BioMed Freiburg runs the BioTechPark Freiburg, which offers optimum start-up and working conditions for both young and established biotechnology companies.

- 30,000 m² available space in the Innovation Centre of Freiburg
- 4,000 m² of subsidized space for start-up companies
- Low start-up rents available for a period of seven years
- Contracts for an unlimited period
- Individual design of the rooms according to the specific demands of the companies
- Possibility to expand within the same location
- Fully equipped Start-up laboratory



At the same time, the Foundation has a scientific advisory board which decides on the companies that are to be admitted to the BioTechPark Freiburg.

BioTechPark Freiburg

Engesserstr. 4a–b D-79108 Freiburg Phone: +49 (0) 761/50 31 92 0 Telefax: +49 (0) 761/38 81 12 99

www.biotechpark.de

Contact person:

Dr. Michael Richter

Services for the companies:

- Advice in all matters regarding business foundation and settlement e.g. in
- conceptualisation
- strategy
- financing
- marketing
- Contact with the authorities, etc.
- Support in finding cooperation partners
- Integration into the network
 BioRegion Freiburg and BioValley



See BIOPRO Baden-Württemberg 🛩



BioRN Network e.V. Im Neuenheimer Feld 582 D-69120 Heidelberg Phone: +49 (0) 6221/64 92 20 Telefax: +49 (0) 6221/64 92 215 info@biorn-network.org www. biorn-network.org Contact person: Sibylle Geilenberg

Production range/Services: Activities:

- Fostering collaboration and technology transfer between public research institutions and private companies
- Promoting the development of the regional infrastructure for research and development
- Connecting the Biotech Cluster Rhine-Neckar with other innovation hubs world-wide

Services for members:

- Access to a strong regional and international biomedical network
- Free or discounted access to regional networking events
- Public relations support for companies and research institutions
- Information about activities in the BioRN Cluster, partner regions and the German biotech landscape
- Contact point for biotech associations, government and funding organizations

Rhine-Neckar Biotech Cluster

The German Biotech Cluster Rhine-Neckar (BioRN) around the cities of Heidelberg, Mannheim, Ludwigshafen and Darmstadt has grown into one of Europe's leading biotechnology clusters. The region is home of numerous internationally renowned research institutes such as the European Molecular Biology Laboratory (EMBL), the German Cancer Research Centre (DKFZ), and the institutes and hospitals of Heidelberg University. Research at these institutes covers all aspects of cell and molecular biology and molecular medicine. Competences in cell culture and screening technologies are concentrated at the Mannheim University of Applied Sciences. Together, more than 3,000 scientists in research institutions are working in biotechnology-related areas.

The cluster is supported by international companies in the biomedical and pharmaceutical/chemical sectors such as Abbott and BASF in Ludwigshafen, Becton Dickinson in Heidelberg, Merck in Darmstadt, and Roche Diagnostics in Mannheim. Thanks to the excellent research environment and strong support for startup companies in the mid-1990s, about 80 innovative biotech companies with own R&D have settled in the region. Many of these companies are involved in developing and commercializing new products and technologies for the diagnosis and therapy of human diseases, especially cancer, cardiovascular and infectious diseases, and diseases of the immune and nervous systems. Beyond that, more than 80 service providers for the biotech industry are located in the region.

In the 2008 Leading-Edge Cluster Competition the BioRN cluster was distinguished as one of of Germany's most significant high tech regions by the Federal Ministry of Education and Research (BMBF) and was awarded grants of 40 million euro for developing the cluster into Europe's prime location for medical biotechnology in the coming years.

The BioRN Cluster Management, a publicprivate partnership, was founded in 2008 by the BioRN Network e.V. association to foster the cluster's network, to develop the region and to market the cluster worldwide. The company aims at bringing innovation into society and expanding the industrial infrastructure. Partners are the Heidelberg Technology Park, the Rhine-Neckar Chamber of Industry and Commerce and the Rhine-Neckar Metropolitan Region.



The logo "Invented in Germany" stands for Leading-Edge Clusters (© BMBF)



The Technology Park Heidelberg

With its 80,000 square metres of rental space at five different locations, more than 80 local companies and research facilities, Heidelberg Technology Park is one of Germany's most important biotechnology centres and a world leader. The recentlyopened fifth site is part of Heidelberg's new Bahnstadt district, where housing and high-tech go hand in hand in an attractive neighbourhood. The so-called Skylabs facility offers 20,000 square metres of flexible office and laboratory space. At the Technology Park, about 160 associated members support the development of biotech companies in the prosperous Rhine-Neckar metropolitan region. The city of Heidelberg and the Rhine-Neckar Chamber of Commerce are the corporate members of the Technologiepark Heidelberg GmbH. The Technologiepark Heidelberg GmbH is the central contact for all companies and cooperating research institutions. Furthermore, Technologiepark Heidelberg GmbH promotes the rapid



growth of this high-tech location by offering comprehensive support services and active networking. It initiates and promotes local, national and international networks, facilitates cooperation between science and business, supports technology transfer in established companies and startups, acquires external firms, offers lobbying services in national and international associations and serves as a contact for local municipal authorities and federal ministries. The International PartnerPort of Heidelberg Technology Park allows a simple and flexible presence on the German market. The abundance of services is further demonstrated by a multimedia conference centre, as well as participation in EU projects to promote collaboration between European bioregions. Since its foundation in the year 1984, the Technology Park's mix of biotechnology, medical technology, information and communication technology and environmental technology has made it a vital source of inspiration in connecting science and business. The Heidelberg University and renowned research institutes such as the European Molecular Biology Laboratory (EMBL), the German Cancer Research Center (DKFZ), the Centre for Molecular Biology (ZMBH) as well as the University of Heidelberg's Biochemistry Centre (BZH) and the Max Planck Institute for Medical Research make up a fertile concentration of life sciences.



Technologiepark Heidelberg GmbH Marktplatz 10 D-69117 Heidelberg Campus Office: Im Neuenheimer Feld 582 D-69120 Heidelberg Phone: +49 (0) 6221/5 02 57 10 Telefax: +49 (0) 6221/5 02 57 11

technologiepark@heidelberg.de www.technologiepark-heidelberg.de

Contact person:

Dr. André H.R. Domin, CEO

Services:

- Helping Start-Ups and SMEs in the life science sector
- Renting office and lab space
- Financing
- Management and marketing
- Legal affairs
- Conference services and organization of networking events, e.g.
- "TP-Lunch Lectures": seminars about current topics
- "TP-Forum" for participants from science, business and politics
- "TP-Apero", monthly informal meetings of tenants and associated members
- Vivid networking via national and international associations, congresses and meetings
- Corporate Rates
- International PartnerPort: a Soft Landing Facility

🗮 BIOPRO Baden-Württemberg 🛩



BioLAGO e.V. life science network Blarerstr. 56 D-78462 Konstanz Phone: +49 (0) 7531/28 42 72 2 Telefax: +49 (0) 7531/28 43 10 6 info@biolago.org www.biolago.org

Contact person:

- Andreas Baur General Manager andreas.baur@biolago.org
- Klaus P. Schäfer Chairman klaus.p.schaefer@biolago.org
- Michael Statnik
 Public Relations
 michael.statnik@biolago.org

Production range/Services:

- Providing consulting services to start-ups
- Transfer of knowledge and technology transfer
- Events
- Public Relations
- Brokering of space
- Brokering of contacts



The executive committee of BioLAGO looks back on 5 years of successful networking in the life science sector at border-crossing Lake Constance. (© BioLAGO)

BioLAGO – Impulse for life sciences at border-crossing Lake Constance area

The area of Lake Constance, which has been officially accredited as the fifth and youngest BioRegion in Baden-Württemberg in 2005, holds a multi-layered life science environment with research institutions (among others the University of Constance, Biotechnology Institute Thurgau, VIVIT-Insitute Dornbirn) as well as internationally successful companies (such as Takeda, Vetter, GATC Biotech).

These institutions and companies teamed up with partner organisations from Germany, Switzerland, Austria and Liechtenstein and created the border-crossing network BioLAGO e.V. in 2007. Developed from a group of regulars, the cluster professionalised by establishing an office in the technology centre in Constance in the middle of 2008. Supported by public and private partnerships the network promotes the interdisciplinary and international exchange in the domain of life sciences and biotechnology for more than five years now.

Several central services are executed by BioLAGO: it connects scientists and entrepreneurs, helps with the realisation of ideas and offers marketable service providers for its members – in short: the strengthening of the contestability of the Lake Constance area as innovative location in Baden-Württemberg. The connection of research and industry is promoted for the main part by issue-specific projects, annual events and activities for direct contacts. BioLAGO e.V. has recorded, accompanied and initiated over 75 cooperation projects between its members to date.

Our Profile

• over 80 equal members in research and industry from 4 countries (Germany, Switzerland, Austria and Liechtenstein)



Business leader at Lake Constance: Europe's leading specialist for DNA sequencing, GATC Biotech AG is located in Constance. (© Frank Kühnel)

- about 6,000 highly qualified jobs in research and industry
- thereof 500 scientists in universities and research institutions
- network areas: health (pharma, diagnostics, analytics) and environmental protection

Our Mission

- providing various services like identification and support of cooperative projects among members and outside partners
- creating and developing brand awareness for the Lake Constance region as an international hub for life sciences
- fostering technology transfer between academia and industry
- support and coaching of start-ups and spin-offs

Technology Campus Constance

– new home of the life sciences

The region of Lake Constance is not only famous for its beautiful scenery and its quality of life, it is also a site of innovation with attractive conditions. In Constance, the region's largest city, the former research campus of pharmaceutical company Takeda recently opened up as a domain for life science, biotechnology and neighbouring High-Tech companies. On its grounds of around 100.000 m², with 15 buildings the campus offers modern, versatile laboratories and highgrade office spaces. Most of the buildings were built in the last ten years. From Start-Up to medium-sized companies - new domiciling businesses profit from the established and prolific life-science environment on the campus and beyond (two universities: University of Constance, Hochschule Konstanz-University of Applied Sciences, hospital and institutes). Moreover, a distinct infrastructure with bus and rail connections is located right at the campus area. Due to its spatial proximity to the neighbouring states Switzerland, Austria and Liechtenstein, the location is especially attractive for internationally operating businesses. The regional branch network BioLAGO supports new settling companies in the interconnection with the life science environment at Lake Constance, which is marked by small and medium sized companies.



The new Technology Campus in Constance offers a big variety of modern laboratories. (© BioLAGO)

See BIOPRO Baden-Württemberg 🛩

BioRegio STERN

BioRegio STERN

Management GmbH Friedrichstr. 10 D-70174 Stuttgart Phone : +49 (0) 711/87 03 54 0 Telefax: +49 (0) 711/87 03 54 44 www.bioregio-stern.de info@bioregio-stern.de Contact person: Dr. Klaus Eichenberg, CEO Employees: 11

Production range/Services:

- Information and PR service for young biotech firms
- Cooperation + networking
- Regulatory affairs
- Online jobportal
- Information and advice on funding options
- Science communications and marketing
- REGiNA Health Region of the Future
- ELSA Engineering -Life Sciences - Automation

Branches

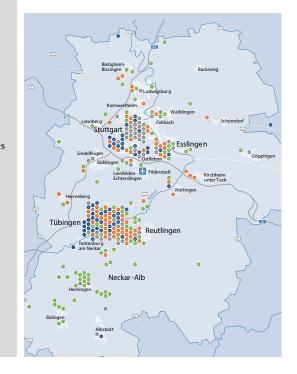
- Regenerative medicine
- Medical technology and devices
- Bioengineering
- Automation

Fields of action

- Economic development
- Services
- Support
- Marketing
- Events

The STERN BioRegion, comprising Stuttgart, Tübingen, Esslingen, Reutlingen and Neckar Alb, is a key center of biotechnology research and development in Germany combining excellent opportunities for young entrepreneurs with outstanding research institutions. Almost 90 biotechnology companies are established in the STERN BioRegion. More than 120 companies from the traditionally strong field of medical technology complete the picture.

Excellent transport infrastructure and close proximity to an exceptionally high number of renowned research institutes and universities make STERN BioRegion the ideal location for companies of all sizes. More than 30,000 square meters of office and lab space are available for entrepreneurs and start-up companies in the Tübingen-Reutlingen Technology Parcs and the Life Science Center in Esslingen.



Thinking business forward

BioRegio STERN Management GmbH is the principal point of contact and source of advice for biotechnology in the region. STERN advises start-ups, established businesses and research institutions on subjects ranging from grant applications and financing options to technology transfer.

It organizes and participates in biotech fairs, promotes networking and offers comprehensive services to all connected with biotechnology in the STERN BioRegion. These services include advice on various kinds of funding, press and public relations services. Anyone founding a life science company or working/ researching in the field can profit from these services which are described in detail on www.bioregio-stern.de.

Creating Synergies

Interdisciplinary thinking is essential. Medical technology companies work together with players in fields as diverse as laser and materials research, micro-systems technology, IT and nanotechnology. There are more than 120 medical technology companies in the high-tech medtech environment of the STERN Region with another 400 in Tuttlingen, where global players in the sector are just as much at home as their suppliers, some of them innovative small and mediumsized enterprises whose products attract international attention. Medical, technical, scientific and industrial expertise is systematically dovetailed here.



ELSA Cluster initiative (Engineering-Life Sciences-Automation)

Other key industries in the region besides biotechnology are the fields of automation and mechanical engineering as well as plant construction. Many companies are automotive suppliers now looking for other branches to diversify their sales market. The ELSA Cluster initiative is funded by the Baden-Württemberg Ministry of Finance and Economic Affairs and aims at bringing the life science clusters already working in the region together with automation and engineering clusters. A number of ELSA cluster events will take place to kick off cooperative projects across branches and to encourage start-ups.

Science2Start - Targeted assistance to transform ideas into successful companies

In the life sciences, a mine of ideas is waiting to be exploited. They lie as yet undiscovered in laboratories, students' rooms and professors' offices. BioRegio STERN's Science2Start ideas competition brings them to light and helps the owners to make a business out of them.

All taking part will profit and three will win. Each outline will be examined for scientific excellence and economic potential and this feedback will be placed at participants' disposal for further use. Those interested in founding their own business will be invited to Science2Start Lounges for discussion sessions and impulse talks. They can rely on the assistance of the BioRegio Management GmbH team at all times.

The three best ideas will be awarded a monetary prize to be presented at BioRegio STERN's annual summer party – an occasion attended by many decision-makers from business, research, politics and the financial sector. Further information at www.science2start.de

REGiNA – "Health Region of the Future"

Regenerative medicine has the potential to revolutionize medicine for both patients and life science companies. To speed up the further development of innovative research and the introduction of tailor-made therapy approaches and products on a nation-wide scale, a Users' Centre for Regenerative Medicine is currently being set up in the REGiNA health region encompassing Stuttgart, Tübingen and the Neckar-Alb region. The Federal Ministry of Education and Research, BMBF, is sponsoring this project which promotes cooperation between researchers, doctors, business companies and the various other branches involved in health care. The internet information portal and a telephone hotline provide users (both doctors and patients) with up to date information on possible applications of regenerative medicine. Further information at www.info-rm.de

TTR Technologieparks Tübingen-Reutlingen GmbH Gerhard-Kindler-Str. 6 D-72770 Reutlingen Phone: +49 (0) 7121/90 97 99 0 Telefax: +49 (0) 7121/90 97 99 15 info@ttr-gmbh.de www.ttr-gmbh.de Contact person: Thomas Dephoff Founded 2001 Space: 22,000 sqm No. of companies: 40

Laboratories: Molecular Biology, Chemistry, S-Laboratories

Next Airport: Stuttgart, 30 km

LSC Esslingen

Stadt Esslingen am Neckar Dept. of Economic Development Rathausplatz 2 D-73728 Esslingen am Neckar Phone: +49 (0) 711/35 12-34 14 Telefax: +49 (0) 711/35 12-55 28 62 www.lsc-esslingen.de **Contact person**: Stephan Reichstein **Founded** 2000 **Space:** 2,000 sqm **No. of companies:** 5 **Laboratories:** Molecular Biology, S-Laboratories

Finance Networks : Life Science Fonds Esslingen

Next Airport: Stuttgart, 15 km

Reference BIOPRO Baden-Württemberg



BioRegionUIm e.V.

Olgastr. 95-101 D-89073 Ulm Phone: +49 (0) 731/17 32 24 Telefax: +49 (0) 731/17 35 22 4 info@bioregionulm.de www.bioregionulm.de info@biopharmaxx.de www.biopharmaxx.de

Contact Person:

Dr. Niklas Nold

Employees: 3

Production range/Services:

- Consulting biotech start-ups
- Cooperation between science and biotech-companises
- Information services and public relations
- Support of young talents

Branches:

Life science industry (biotech, diagnostics, pharma, medical engineering)

Fields of action:

- Biotechnology services
- Biotechnology location
- Cluster management



Science, education, and industry are equally well-represented in the BioRegionUlm. The biotech companies of the region focus on the production of drugs. The BioRegionUlm is Europe's central location for biotechnological production, in particular of pharmaceutical products. More than sixty enterprises from biotechnology, life sciences and medicinal engineering have settled in the area between the Schwäbische Alb and the Lake of Constance.

A healthy mixture of established enterprises of international reputation and start-ups in the BioRegionUlm leads to a continuous dynamic development with excellent business figures. The largest number of genetically engineered pharmaceutical products in Europe are produced in the BioRegionUlm.

Ulm is also a city where business meets with its University. The University and academic as well as industrial research institutions offer the ideal infrastructure for engaging in partnership and an effective transfer of knowledge and technology. For example the University of Ulm has enlarged its life sciences' field through the construction of two life science buildings where the university's research excellence is concentrated and networking in the different biotech fields is guaranteed.

A germanwide unique degree specific course in pharmaceutical biotechnology at the



Boehringer employee purifying proteins

(Photo: Boehringer Ingelheim)

University of Applied Sciences in Biberach in cooperation with the University of Ulm (including the doctoral study course) strengthens the biopharmaceutical excellence in the BioregionUlm. Meanwhile a second course in industrial biotechnology completes Biberach's study guide in this field.

Since 2011 the Boehringer Ingelheim Ulm University Center (BIU) which is also supported by the government of Baden-Württemberg continues the extraordinarily successful scientific cooperation in the field of pharmaceutical biotechnology in the Ulm Bioregion and opens up new strategies for the Graduate School of Molecular



Preparation of a chromatography column. (Photo: Rentschler Biotechnology)

Medicine, which is funded under the German government's Excellence Initiative.

The dynamic development of the location can be put into figures. The BioRegion has shown the most growth in Germany in the area of pharmaceuticals. Since 2003 more than 2000 new jobs were provided. Planned and actual corporate investments since 2003 come to over 1 bn €.

The initiative BioPharMaXX is strengthening the BioRegionUlm as a biopharmaceutical cluster by networking all players of the valueadded chain (diagnostics, pharma, biotech and medical engineering) to create new products and services for the growing health market.

BiotechnologieZentrum Ulm (Biotechnology Center Ulm) part of the TFU-TechnologieFörderungs Unternehren GmbH (Technology Promotion Ltd.) Sedanstr. 14 D-89077 Ulm Phone: +49 (0) 731/98 58 80 Telefax: +49 (0) 731/98 58 83 45 info@tfu.de

Contact person:

Ulrike Hudelmaier, Arina Ingendorf

Employees: 6

Production range/Services:

- \bullet TFU total area 10,000 $m^{\scriptscriptstyle 2}$
- Biotechnology Center Ulm
 ca. 1,500 m² laboratory-space
- attractive renting conditions
- reduced operating costs in start-up phase

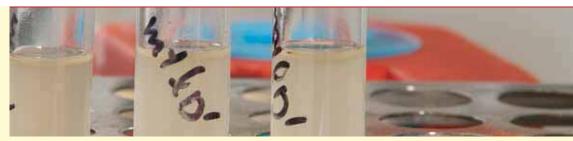
Fields of action:

 Start-ups and young companies find ideal surroundings with suitable laboratories, involve ment in Ulm Science City as well as contact to biotechnology companies in the region

🗮 BIOPRO Baden-Württemberg 🛩



Fields of Action



🗮 BIOPRO Baden-Württemberg 🗯

		I Services ion logy										logy		S			
Page		Agriculture/Food	Analytics	Bioinformatics	Biotechnological Services	Contract Research	Custom Production	Diagnostics	Environmental Biotech	Supplier	Therapeutics	Tissue Engineering	White Biotechnology	Cells/Cell Lines	DNA/RNA	Production Organisms	Proteins/Peptides
				1		I	Fie	lds		1		1			Expe	rts in	
29	4base lab GmbH		•		•			•							•		
30	Acrovis [®] biostructures GmbH			•		•					•						•
31	Affimed Therapeutics AG										•						
32	Agilent Technologies Sales & Services GmbH & Co. KG	•	•	•				•	•	•					•		•
33	Agrano GmbH & Co. KG	•															
34	Aldevron Freiburg GmbH				•	•	•							•	•	•	•
35	Anoxymer GmbH	•	•														
36	Apara Bioscience GmbH						•			•					•		•
37	Ascendis Pharma GmbH										•						•
38	ATG:biosynthetics GmbH		•	•	•		•	•					•		•		•
39	Atoll GmbH						•			•							•
40	BERTHOLD TECHNOLOGIES GmbH & Co. KG		•					•	•								•
41	Biametrics GmbH		•							•							
42	Bioassay-Labor für biologische Analytik GmbH		•		•												•
43	BioCat GmbH		•				•			•					•		•
44	BioChem GmbH		•		•												
45	biomers.net GmbH				•		•								•		
46	BIOMEVA GmbH				•	•	•				•					•	•
47	BIOPHARM GmbH				•	•		•			•	•					•
48	BioRépair GmbH							•		•							
49	biosyn Arzneimittel GmbH	•	•					•			•						•
50	BioTeSys GmbH	•	•		•												
51	BioTissue Technologies GmbH										•	•		•			
52	BMG LABTECH GmbH		•												•		•

		'Food		ics	Biotechnological Services	search	duction		Environmental Biotech		Ş	neering	chnology	ines		Organisms	ptides
Page		Agriculture/Food	Analytics	Bioinformatics	Biotechnolo	Contract Research	Custom Production	Diagnostics	Environmer	Supplier	Therapeutics	Tissue Engineering	White Biotechnology	Cells/Cell Lines	DNA/RNA	Production Organisms	Proteins/Peptides
				•			Fie	lds				•	•		Ехре	rts in	
53	Boehringer Ingelheim Biopharmaceuticals				•		•				•			•	•	•	•
54	CANDOR Bioscience GmbH		•		•		•	•		•							•
55	cecolabs UG		•		•		•									•	
56	CeGat GmbH		•	•	•			•							•		
57	Cellca GmbH				•	•	•				•			•		•	•
58	Cellendes GmbH									•		•		•			
59	CellGenix GmbH									•	•	•		•			
60	Cellzome AG		•								•						•
61	CETICS Healthcare Technologies GmbH		•					•		•					•		
62	ChemCon GmbH		•				•										
63	Comprehensive Biomarker Center GmbH		•	•	•			•							•		
64	Computomics GmbH & Co. KG	•		•											•		
65	Crinotec GmbH	•	•			•	•										
66	Curetis AG							•							•		
67	CureVac GmbH										•				•		
68	Cytonet GmbH & Co. KG										•			•			
69	da-cons GmbH data analysis & consulting		•	•													
70	DIARECT AG							•		•						•	•
71	DSM Nutritional Products GmbH Grenzach	•					•										
72	EMC microcollections GmbH		•		•		•										•
73	ExploSYS GmbH			•													
74	FRUTAROM Savory Solutions GmbH	•					•						•				
75	GATC Biotech AG		•	•	•										•		
76	Genaxxon BioScience GmbH		•		•		•			•					•		•
77	Gene Bridges GmbH				•	•	•			•			•		•		
78	Genotype GmbH		•		•										•		

🗮 BIOPRO Baden-Württemberg 🗺

					ces							10					
					Servi	_	E		otech			<u>b</u>	λgo			isms	
		Food		S	gical	searc	ducti		tal Bi		10	leerir	louh	les		Drgar	otides
Page		Agriculture/Food	Analytics	Bioinformatics	Biotechnological Services	Contract Research	Custom Production	Diagnostics	Environmental Biotech	Supplier	Therapeutics	Tissue Engineering	White Biotechnology	Cells/Cell Lines	DNA/RNA	Production Organisms	Proteins/Peptides
							Fie	lds				Experts in					
79	Glycotope Biotechnology GmbH		•		•	•	•	•			•			•		•	•
80	Graffinity Pharmaceuticals GmbH		•			•					•						•
81	greenovation Biotech GmbH						•				•						•
82	Greiner Bio-One GmbH							•		•							
83	Hain Lifescience GmbH							•		•					•		
84	HB Technologies AG			•	•		•								•		•
85	Heidelberg Pharma AG		•		•	•					•			•			•
86	HiSS Diagnostics GmbH		•				•	•		•				•	•		•
87	Hydrotox GmbH		•			•			•								
88	IBAM GbR Dr. Rainer Knörle & Dr. Peter Schnierle		•		•	•					•						
89	ibt- Immunological and Biochemical Testsystems GmbH		•				•	•		•		•					•
90	immatics biotechnologies GmbH										•						•
91	Insilico Biotechnology AG			•		•					•		•				
92	Jobst Technologies GmbH		•				•	•	•								
93	Junker Filter GmbH								•								
94	LABOR DR. MERK & KOLLEGEN GmbH		•		•		•	•						•		•	•
95	Labor für DNA-Analytik		•		•			•							•		
96	Logopharm GmbH		•	•	•	•				•							•
97	Mediagnost GmbH				•	•	•	•						•		•	
98	MEDICHEM Diagnostica GmbH & Co. KG		•				•	•		•							
99	Medicyte GmbH						•			•		•		•			
100	menal GmbH Gesellschaft für medizinisch naturwissenschaftliche Laboranalyik		•		•					•							•
101	MetaSystems GmbH		•	•				•		•					•		

		Food		ics	Biotechnological Services	search	duction		tal Biotech		S	neering	chnology	nes		Organisms	otides
Page		Agriculture/Food	Analytics	Bioinformatics	Biotechnolo	Contract Research	Custom Production	Diagnostics	Environmental Biotech	Supplier	Therapeutics	Tissue Engineering	White Biotechnology	Cells/Cell Lines	DNA/RNA	Production Organisms	Proteins/Peptides
							Fie	lds							Expe	rts in	
102	micro-biolytics GmbH	•	•		•					•							
103	MicroMol GmbH	•	•		•		•							•		•	•
104	Multi Channel Systems MCS GmbH		•	•			•			•							
105	nadicom Gesellschaft für angewandte Mikrobiologie mbH		•	•	•	•			•						•		
106	nanoTools Antikörpertechnik GmbH & Co. KG									•							•
107	npi electronic GmbH						•			•							
108	n-bio GmbH								•								
109	Oncotest GmbH		•		•	•					•			•	•		•
110	PANATecs GmbH		•		•		•			•							•
111	PEPperPRINT GmbH		•		•		•	•			•						•
112	Peptide Specialty Laboratories GmbH						•			•							•
113	PromoCell GmbH									•				•			
114	ProQinase GmbH		•		•		•				•			•			•
115	Q-bios GmbH				•		•	•		•				•	•	•	•
116	ravo Diagnostika GmbH							•									
117	rent-a-lab Dr. Carsten Tober		•		•	•											
118	Rentschler Biotechnologie GmbH		•		•		•				•			•		•	•
119	RHEACELL GmbH & Co. KG						•			•				•			
120	Roche Diagnostics GmbH Roche Diagnostics Deutschland GmbH		•					•			•				•		•
121	Sciomics GmbH		•		•		•	•									•
122	SEARCH-LC GmbH		•		•					•					•		
123	Sensovation AG		•					•		•							
124	SGS M-Scan GmbH		•		•	•					•				•		•
125	Subitec GmbH	•							•								

🗮 BIOPRO Baden-Württemberg 🗺

					Services		Ę		otech			ß	ABC			isms			
1		e/Food		atics	logical :	Research	roductic	S	ental Bio		ics	gineerin	technolo	Lines	2	n Organ	eptides		
Page		Agriculture/Food	Analytics	Bioinformatics	Biotechnological Services	Contract Research	Custom Production	Diagnostics	Environmental Biotech	Supplier	Therapeutics	Tissue Engineering	White Biotechnology	Cells/Cell Lines	DNA/RNA	Production Organisms	Proteins/Peptides		
							Fie	lds							Experts in				
126	SYGNIS Pharma AG							•							•		•		
127	SYMBIOSIS		•		•			•			•	•					•		
128	SYNIMMUNE GmbH										•						•		
129	Synovo GmbH		•		•	•					•			•					
130	TETEC AG											•		•					
131	TEVA GmbH										•								
132	TherapySelect GmbH & Co. KG							•											
133	Thermo Fisher Scientific - Phadia GmbH		•					•									•		
134	TICEBA GmbH				•									•					
135	Trenzyme GmbH				•		•							•	•	•	•		
136	varionostic GmbH		•		•										•				
137	VAXIMM GmbH										•								
138	Vetter Pharma International GmbH						•												
139	Viscofan BioEngineering a Business Unit of Naturin Viscofan GmbH									•		•							
140	VIVACELL Biotechnology GmbH	•	•			•								•					
141	WITec GmbH		•							•									
142	Züblin Umwelttechnik GmbH								•										
143	Zwisler Laboratorium GmbH		•		•									•					

Definitions of Fields of Action

Agriculture/Food: Companies using innovative biotechnological methods in the fields of nutrition and/or agriculture. This does not include classical fermentation technologies that have been used for many centuries, e.g. for the production of wine and sauerkraut.

Analytics: Companies manufacturing products for laboratory analytics or providing analytical services, e.g. sequencing, HPLC.

Bioinformatics: Companies developing software for application in the life sciences/ biotechnology or providing clients with bioinformatics or IT/IT services for specific application in the field of systems biology. Not included are software products for use in medical practices or clinics, e.g. software for sequence optimisation, modelling of signalling cascades.

Biotechnological services: Companies providing clients with biotechnological laboratory services, e.g. sequencing, PCR, cloning, analytical methods, cell banks.

Contract Research: Companies carrying out research projects in the fields of biotechnology/life sciences on behalf of clients.

Custom Production: Companies providing clients with contract production in the field of biotechnology, e.g. the production of primers, proteins.

Diagnostics: Companies providing diagnostic laboratory services and companies manufacturing products for use in in vitro diagnostics. Not included are manufacturers of laboratory articles such as 96-well plates.

Environmental Biotech: Companies using biological systems in technological methods with the goal of reducing environmental stress and saving resources. The companies typically combine knowledge in bioprocess engineering, applied microbiology and applied engineering to develop and use methods for air and waste gas purification, soil decontamination, water and wastewater purification or waste treatment.

Suppliers: Companies manufacturing consumables and equipment for biotechnological applications, e.g. reaction vials, centrifuges, reagents, kits, antibodies for research or diagnostics as well as devices for the analysis of experiments such as ELISA readers.

Therapeutics: Companies focussed on research, development and production of products for therapeutic purposes using biotechnological tools, e.g. proteins, peptides, antibodies.

Tissue Engineering: Companies carrying out research or other activities in the field of regenerative medicine. This includes, for example, the production of cell preparations, tissues, and scaffolds that provide structural support for the attachment of patient cells and subsequent tissue development.

White Biotechnology: Companies employing biotechnological methods to manufacture industrial products such as organic basic and fine chemicals, food and food additives, technical enzymes and biofuels with microorganisms, cells or their constituents. The term can also refer to companies that carry out R&D in this field, including the development of bacterial strains. Companies from the field of red biotechnology are not part of this field.

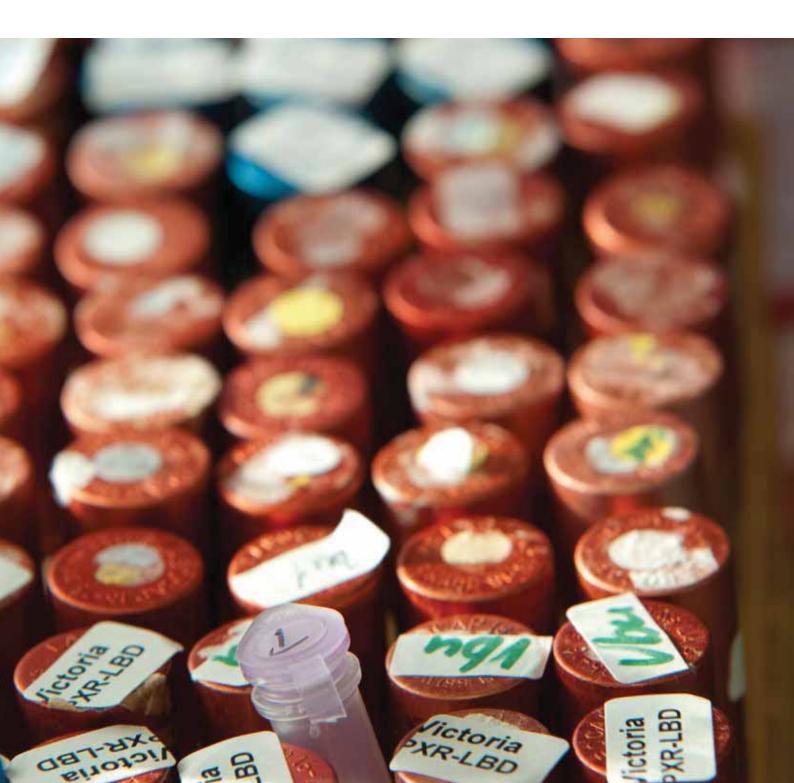
Cells/Cell Lines: Companies active in the field of cells/cell lines, including companies that offer cell line development, produce biotechnological products using cells, develop/offer cell therapies as well as companies that develop/manufacture products for work involving cells (e.g., cell cultures); companies that use cells for biotechnological services or contract research.

DNA/RNA: Companies with activities related to DNA/RNA, e.g., sequencing, epigenetics, cloning, therapeutic RNA.

Production Organisms: Companies using cells or microorganisms for the biotechnological production of antibodies/proteins, for example, as well as companies offering cell and strain development for subsequent use in biotechnological manufacture of products.

Proteins/Peptides: Companies with activities related to proteins/peptides, e.g. companies that manufacture and commercialise proteins/peptides/antibodies or companies that produce them on behalf of third parties; companies focussing on research and production of proteins/peptides or companies that manufacture products for the analysis of proteins.

🗮 BIOPRO Baden-Württemberg 🗯



Company Profiles



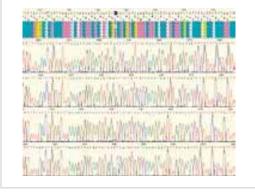
🗮 BIOPRO Baden-Württemberg 🗺



4base lab GmbH – advanced molecular analysis

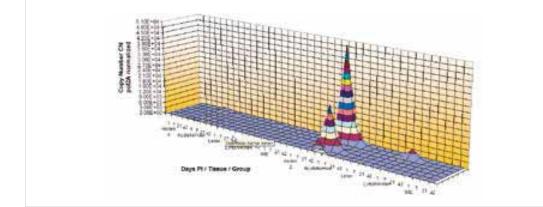
4base lab GmbH was founded in 1996 and holds excellent expertises in molecular cloning and gene analysis of human pathogens. As one of the first biotech companies in Germany, 4base lab operates its enterprise in compliance with the quality management standard as specified by the DIN EN ISO 9001:2000 and is an accredited testing laboratory in accordance with DIN EN ISO/IEC 17025:2005. Facilities include S1/L2 labs as well as strictly controlled PCR labs. 4base lab is also approved by regulatory authorities to analyse animal samples for epizootic diseases. Since 2006, 4base lab was also authorized by the Regierungspräsidium Tübingen to perform GMP compliant services for biopharmaceutical drugs, especially for innovative RNA-based cancer therapeutics.

4base lab offers an extensive expertise in the development and validation of customized qNAT assays. GMP compliant methods for biodistribution analysis of DNA-/RNA targets in tissue samples, detection of residual vector DNA or E. coli DNA in preclinical drugs are available for the pharmaceutical industry.



Ultrapure human BAC-DNA and genetic stability testing are additional services for diagnostic manufacturers.

4base lab offers a wide range of molecular services including Real-Time PCR for the detection of pathogens in blood, pharmaceuticals, food, water, human or insect samples. In 1999, 4base lab achieved a permission of the Paul-Ehrlich-Institut to use its Hepatitis-C Real-Time assay for virus detection in blood products. Recently, 4base lab developed a CE marked kit for the detection of Influenza A viruses (incl. H1N1, H5N1) to be used for in vitro diagnostics. Multiplex detection of Influenza A/B is also available. We also analyse community and environmental samples for presence of lyme-disease-causing bacteria utilizing state-of-the-art technology.





4base lab GmbH

Aspenhaustr. 25, Postfach 4023 D-72770 Reutlingen Phone: +49 (0) 7121/93 75 57 Telefax: +49 (0) 7121/93 75 58 office@4base-lab.com www.4base-lab.de

Contact person: Birgit Blum

Employees: 10

Production range/Services:

- Custom DNA sequencing
- GMP/GLP compliant services for biopharmaceutical drugs (identity, contamination)
- Biodistribution analysis of preclinical biopharmaceuticals
- Quality surveillance for PCR inhibitors in consumables and viral contamination
- CE-Kit for the detection of Influenza A (incl. H1N1, H5N1)
- Detection of Borrelia DNA in ticks

Fields of action:

- Analytics
- Biotechnological Services
- Diagnostics
- DNA/RNA

Reference BIOPRO Baden-Württemberg



ACROVIS[®] biostructures GmbH

Rathausgasse 1 D-89160 Dornstadt Phone: +49 (0) 7348/94 93 280 Telefax: +49 (0) 7348/94 93 278 info@acrovis.de www.acrovis.de

Contact person:

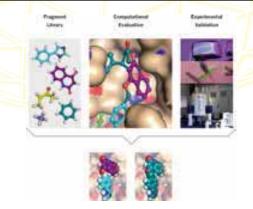
Dr. Thomas Haehner

Employees: 7

Fields of action:

- Bioinformatics
- Contract Research
- Proteins/Peptides
- Therapeutics





ACROVIS[®] biostructures was founded in October 2008. Our aim is to fill in a gap in the pharmaceutical value-added chain by rationalizing and commercializing the industrial development of drug candidates by using benchmark technology.

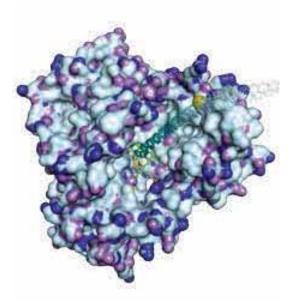
ACROVIS[®] biostructures assists its clients in the process of developing drug candidates which feature both a highly specific inhibitory activity and outstanding pharmacokinetic properties with almost zero toxicity.

Our in-house X-ray and NMR research facilities, biophysical experiments and state-of-the-art CADD analysis deliver the respective data crucial for the structure-based drug design.

The process of optimization of a chemical compound takes into account the drug target in its essential conformational states.

In this highly complicated and challenging task, our in-house technology platform AcroDyn[®] is able to detect all the crucial states of a macromolecule. Consequently, the identification and optimization of the drug candidates become highly effective. Furthermore, ACROVIS[®] biostructures offers the benchmark technology fragment-based drug design (FBDD) which is capable of finding novel hit structures.

Depending on the NCE's research and development needs of our clients, ACROVIS[®] biostructures offers a variety of services ranging from hit finding to optimization of a lead structure. Our small molecules show a high inhibitory activity due to an excellent structural fitting, a high bioavailability and a favorable side effect profile. This molecular properties make the process of drug development more successful.



affined a

Affimed Therapeutics AG

Technologiepark Im Neuenheimer Feld 582 D-69120 Heidelberg Phone: +49 (0) 6221/65 30 712 Telefax: +49 (0) 6221/65 30 777 www.affimed.com

Contact person: Daniela Treiber

Employees: 37

Production range/Services:

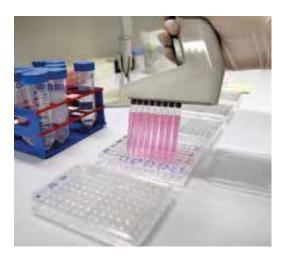
• Biologics/Antibodies

Fields of action:

• Therapeutics

Affimed Therapeutics AG is a Heidelbergbased clinical stage biotech company developing TandAb antibodies in oncology. TandAbs are human antibodies with excellent binding properties and product stability. They are bispecific and tetravalent, comprising solely variable domains. TandAbs can bind to immune effector cells (NK cells or T cells) targeting these cells to the tumor by binding to a tumor-associated antigen where these immune effector cells display a very potent and specific cytotoxic activity. The TandAb antibody format promises both increased therapeutic potential and superior safety profiles compared to monoclonal antibodies. Furthermore, when compared to antibody fragments and scaffolds, TandAbs show better targeting properties due their bivalent binding and have a much longer half-life.

Affimed's therapeutic pipeline consists of two TandAb products, AFM11 and AFM13. AFM13, a CD30/CD16A TandAb, has recently completed a phase I clinical trial in relapsed/refractory Hodgkin Lymphoma patients. The trial established that AFM13 was safe and well tolerated at all dose levels and showed meaningful





anti-tumor activity, which warrants further clinical development. AFM11, a CD19/CD3 TandAb for the treatment of B-cell lymphomas, such as non-Hodgkin lymphoma (NHL) and acute lymphoblastic leukemia (ALL), is in late stage preclinical development and expected to enter phase I clinical studies in 2013. Both candidates address markets with high medical need and significant sales potential.

Affimed was founded in 2000 as a spin-off of the DKFZ in Heidelberg and employs 37 people. Affimed is backed by a peer group of investors including Orbimed, Aeris, LSP, BioMed Invest and Novo Nordisk A/S and recently closed a Series D financing round with \in 15.5 million in September 2012.



See BIOPRO Baden-Württemberg 🗲



Agilent Technologies

Agilent Technologies

Sales & Services GmbH & Co. KG Hewlett-Packard-Str. 8 D-76337 Waldbronn Phone: +49 (0) 800/6 03 10 00 Telefax: +49 (0) 69/95 30 79 19 customercare_germany@agilent.com www.agilent.com/chem Contact person: Alexandra Nagel Branches: USA, Asia Pacific, EMEA Employees: 20,500 Production range/Services: Microfluidics, microarrays (Catalog & Custom Arrays), microarray scanner, QPCR & PCR, automation solutions, bioinformatics, bioconsumables, liquid chromatography systems, dissolution, magnetic resonance solutions, molecular spectroscopy, mass spectrometry systems, ICP-MS systems, atomic spectroscopy, gas chromatography systems, UVvisible spectrophotometer, electrophoresis, X-ray christallography, data handling, support/services, columns and supplies

Fields of action:

- Agriculture/Food
- Analytics
- Bioinformatics
- Diagnostics
- Environmental Biotech
- Supplier
- DNA/RNA
- Proteins/Peptides

Agilent Technologies Inc. (NYSE:A) is the world's premier measurement company and a technology leader in communications, electronics, life sciences and chemical analysis. The company's 20,500 employees serve customers in more than 110 countries. Agilent had net revenues of \$6.9 billion in fiscal 2012. Agilent's Life Sciences and Chemical Analysis (LSCA) group is a world leading provider of instrumentation, supplies, software and services to life science and chemical analysis markets.

LSCA's key technology platforms include gas chromatographs (GC), liquid chromatographs (LC), mass spectrometers (MS), microarrays, and microfluidics-based devices. These technologies make possible the identification, quantification, and analysis of the atomic, molecular, physical and biological properties of thousands of substances and products. Agilent LSCA is a world market leader in gas chromatography, liquid chromatography, mass spectrometry, microfluidics and compliance services, with product and technology leadership in many areas, including gene expression and proteomics analysis. In the life sciences,





Agilent is helping organizations to advance basic research, unlock the genetic causes of disease and accelerate the discovery and development of new drugs. Agilent addresses the needs of the entire pharmaceutical value chain with solutions for gene expression, proteomics, informatics, pharmaceutical analysis (for drug development, QA/QC, and manufacturing), and regulatory compliance. As the leading provider of chemical analysis tools, Agilent develops and markets solutions for the growing environmental, petrochemical, energy, food safety and quality, and AgBio markets, and supports homeland security with instruments and expertise in biochemical detection and forensics.





Factory premises in Riegel am Kaiserstuhl

Expertise in fermentation of microorganisms

Agrano GmbH & Co. KG, founded in 1996 and located in Riegel am Kaiserstuhl near Freiburg, is specialised in the production of organic yeast. Today, the company has approximately 50 employees and supplies customers with organic yeast products around the globe.

Agrano GmbH & Co. KG can also look back on many years of experience in collaboration with external companies during the development and fermentation of special microorganisms. Ideal conditions prevail in Riegel am Kaiserstuhl for scaling up the biotechnological processes.

For product development, a highly qualified team of microbiologists, biochemists and process engineers is available. Using various fermenter sizes, the developments can take place at laboratory scale (15 l) through to complete production-ready facilities



Through intensive collaboration with colleges and universities, Agrano GmbH & Co. KG can continuously expand its expertise in the research and development of biotechnological processes.

(75,000 l). As all the fermentations are performed under sterile conditions and the most stringent hygiene standards, simultaneous processes are possible in the various development stages.

Different separators and a vacuum rotary filter are available for further processing. If required, additional down stream processes can be installed. In the pilot facility, large product samples can be produced for initial market testing.



Agrano GmbH & Co. KG

Bahnhofstr. 35 D-79359 Riegel am Kaiserstuhl Phone: +49 (0) 7642/67 26 3 Telefax: +49 (0) 7642/67 26 9 info@agrano.de www.agrano.de

Contact person:

Jürgen Lamm, Director R&D Ralf Bredenhöller, Managing Director

Employees: approx. 50

Production range/Services:

- Organic yeast products for industrial processing and the organic specialised trade
- fermentation on commission
- fluidised-bed drying
- spray granulation
- coating
- agglomeration

Fields of action:

• Agriculture/Food



Sterile fermentation

Reference BIOPRO Baden-Württemberg

aldevron

Aldevron Freiburg GmbH

Waltershofener Str. 17 D-79111 Freiburg Phone: +49 (0) 761/45 63 6 0 Telefax: +49 (0) 761/45 63 6 29 antibody@aldevron.com www.aldevron.com

Contact person:

Dr. Stefan Lang

Branches: Aldevron in Fargo, ND and Madison, WI, USA

Employees: 80 (worldwide)

Production range/Services:

- Gene synthesis and optimisation
- Plasmid manufacturing
- Antibody generation (genetic immunisation, protein/peptide Immunisation)
- Antibody purification, fragmentation, labelling, sequencing
- ELISA development
- Protein Expression (E. coli, insect cells, mammalian cells)
- Antibody catalogue

Fields of action:

- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- Custom Production
- DNA/RNA
- Production Organisms
- Proteins/Peptides

Aldevron provides contract manufacturing and scientific services for antibody generation, protein manufacture and plasmid DNA production. Aldevron Freiburg (formerly GENOVAC) is a biotechnology company located in Freiburg, in the centre of the European BioValley. Our main business is focussed on the generation of custom-made antibodies and complementary services as a service for biotechnology and pharmaceutical companies as well as for academic customers. Aldevron Freiburg is a daughter company of US based Aldevron LLC.

Aldevron Freiburg has established itself in the world market as a company that is well known for its high quality antibodies and has successfully





generated a niche in this field. We are the leading company in the generation of antibodies by genetic immunisation. We have a patent-protected technology that allows us to quickly bridge the gap between the mass of DNA sequences that have become available to directly identify the gene products and to study their function with the help of antibodies. These antibodies have ideal characteristics for diagnostic and therapeutic applications.

We offer a uniquely broad scope of antibody production services that will progress your research from an in silico concept to a high affinity monoclonal with unprecedented speed, cost efficiency, and success rate. Our process includes a fully integrated ability to assist in the design, undertake animal studies, purify targets, and manufacture. As Aldevron's antibody services facility we have adopted all classical and state-of-the-art delivery methods to optimize the titre and quality of an antibody. Whether your project is a simple study to generate polyclonal antisera, or a complex undertaking culminating in the delivery of purified monoclonal antibodies, we are here to help.

Our long standing experience, know-how, and track record make us a preferred vendor for many large pharmaceutical and major biotechnology companies.

Botanical Health Ingredients for Functional Foods and Nutraceuticals

Anoxymer's core competence is the bio-assay guided isolation of bioactive natural carbohydrate-based compounds from vegetables, herbs and fruits for the development and commercialization of botanical health ingredients with clinically proven benefits for the health prevention.

Research & Development

In-vivo-assays (CAM-assay and its variations) are used for the screening of anti-inflammatory, antioxidative, anti-angiogenic or immunmodulating bio-activities. Toxic effects can be detected, e.g. embryo-toxicity and membrane-irritation as well. Anoxymer also offers its CAM-assay to the pharmaceutical industry for the screening of antiangiogenic compounds, e.g. recombinant proteins and peptides, small molecules and natural compounds.

Products

Various plant extracts (registered as Planox[®]) are biologically and chemically standardized to Anoxymins[®]. These special extracts are com-



mercialized as health ingredients with disease preventive properties e.g.: Planox[®] L for joint health; Planox[®] A for digestive health; Planox[®] PG for cardiovascular health; further botanical extracts for mental performance and weight management are under development.

Safety-Quality-Efficacy

The ethno-botanical approach and the CAMassays guarantee for non-toxic extracts without side-effects. All extracts are completely watersoluble, standardized on carbohydrates, clinically tested and adapted to different food matrices which preserve stability and bioavailability of the bio-active compounds.

anoxymer® Botanical Health Ingredients

Anoxymer GmbH

Schelztorstr. 54-56 D-73728 Esslingen Phone: +49 (0) 711/90 12 10 90 Telefax: +49 (0) 711/90 12 10 99 info@anoxymer.info www.anoxymer.info

Contact person: Wolfgang Neldner

Employees: 6

Production range/Services:

Standardized plant extracts as health ingredients for functional foods, nutritional supplements and cosmeceuticals

- Agriculture/Food
- Analytics



BIOPRO Baden-Württemberg



Apara Bioscience GmbH

Ferdinand-Porsche-Str. 5/1 D-79211 Denzlingen Phone: +49 (0) 7666/88 39 40 Telefax: +49 (0) 7666/88 39 41 order@apara-bioscience.de www.apara-bioscience.de

Contact person: Alexander Häringer

Employees: 5

Production range/Services:

Oligonucleotides and peptides

Fields of action:

- Custom Production
- DNA/RNA
- Proteins/Peptides
- Supplier





Apara Bioscience GmbH

The major focus of Apara Bioscience GmbH is the high quality synthesis of oligonucleotides and peptides.

The company was established in January 2003 as a spin-off from Genescan Europe AG, a merger of four biotech companies, including BIG Biotech GmbH and BioChip Technologies GmbH. Oligonucleotide production was started by BIG Biotech GmbH back in 1993 which merged with Biochip Technologies GmbH in 2000. Hermann GbR became part of Apara Bioscience GmbH on 1st January 2007. The growth rate of Apara Bioscience GmbH over the last few years has led to increases in staff numbers and to the company itself becoming a limited liability company (GmbH). The managing director, Alexander Häringer, and his team consider themselves to be competent partners for their customers.

Apara Bioscience offers inexpensive conditions and rapid delivery of oligonucleotides and peptides, even for small orders. The expansion of our production capacities has enabled us to respond to individual customer requirements, whether the order concerns 2 or 200 oligonucleotides. Our laboratory team deals with customer orders both professionally and reliably.

For further information about the reliable services offered by Apara Bioscience, please contact us and we will be happy to discuss your particular requirements.

Ascendis Pharma GmbH

Ascendis Pharma is an emerging speciality pharmaceutical company which creates improved, patentable versions of marketed drugs and high-value development-stage opportunities. The company operates within the therapeutic areas of endocrinology, central nervous system, cardiology, ophthalmology and infectious diseases.

The company is built upon a novel prodrug technology, called TransCon, which conjugates peptides, proteins or small molecules to a carrier molecule in a reversible fashion. This unique reversibility allows an unmodified active drug to be released (unlinked) in the body in a precise, time-controlled fashion, creating a long-acting effect. Conventional conjugation technologies are unable to achieve this type of slow-release mechanism because the carrier molecule cannot de-link from the drug.

Ascendis Pharma has seven high-value products in its portfolio, of which the lead program – TransCon PEG hGH – is a superior growth hormone with a once-weekly dosing regime, and this is part of the company's specialty focus on endocrinology.

The company is headquartered in Palo Alto, California and Copenhagen, Denmark. Ascendis Pharma's research site is located in Heidelberg, Germany.



Heidelberg, Germany



Copenhagen, Denmark



Palo Alto, CA, USA



Ascendis Pharma GmbH Im Neuenheimer Feld 584 D-69120 Heidelberg Phone: +49 (0) 6221/4 38 53 0 Telefax: +49 (0) 6221/4 38 53 11 germanoffice@ascendispharma.com www.ascendispharma.com Contact person: Dr. Harald Rau, CSO Branches: Palo Alto, CA (USA) Copenhagen, Denmark Employees: 40

Production range/Services:

Ascendis Pharma has built a high value pipeline with focus on endocrinology, CNS, cardiology, ophthalmology and infectious diseases. Using our innovative prodrug technology platform TransCon, we continue to analyze opportunities to develop a sustainable pipeline for the future and to optimize strategic business development value. Proprietary to Ascendis :

- TransCon human Growth Hormone
- TransCon Paliperidone
- TransCon Pramipexole
- Partnered with sanofi:
- TransCon Insulin
- TransCon Exendin TransCon Insulin/Exendin combination

Partnered with United Therapeutics:

• TransCon Treprostinil

- Proteins/Peptides
- Therapeutics

🗮 BIOPRO Baden-Württemberg 🛩



ATG:biosynthetics GmbH

Weberstr. 40 D-79249 Merzhausen Phone: +49 (0) 761/8 88 94 24 Telefax: +49 (0) 761/8 88 94 25 info@atg-biosynthetics.com www.atg-biosynthetics.com

Contact person:

Dr. Hubert Bernauer

Employees: 7

Production range/Services:

- Toggle multi-protein expression kits
- PepID peptide library generation and expression system
- Synthetic bioinformatics
- Gene and gene cluster synthesis

Fields of action:

- Analytics
- Bioinformatics
- Biotechnological Services
- Custom Production
- Diagnostics
- DNA/RNA
- Proteins/Peptides
- White Biotechnology



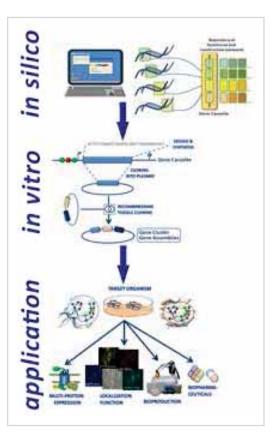
ATG is a synthetic biology and biotech company that combines proprietary analytical and synthetic bioinformatics tools and expertise with systems for the design, assembly and expression of (multi-)gene and multi-peptide constructs.

ATG offers products and services for R&D in industrial and medical biotechnology, drug discovery, molecular diagnostics, metabolic and bio-engineering, etc.

- Multi-gene recombineering / expression systems for E.coli, insect and mammalian cells (Toggle, MultiLabel)
- Tailor-made expression systems for other (micro)organisms based on a modular assembly strategy (Toggle)
- Proprietary multi-peptide library design tool as well as biosystems-based multipeptide library construction and expression system (PepID) for rationally designed bio-peptide libraries. For use in assessing, identifying (mapping) and verifying peptide epitopes, antibodies, or protein-protein-interaction. Applications in R&D for diagnostics and therapy.
- Gene intelligence solution EvoMAG for multi-parametric sequence calculations for complex (artificial) gene/combinatorial gene cluster design as well as formal and operational optimization of genes, genetic elements and expression cassettes for diverse target/ production organisms (for functional enzyme

optimization, metabolic engineering, signal pathway analysis, TALE Nucleases, etc.)

• Gene synthesis of individual genes and gene clusters, TALE nucleases, etc.



- Plasmid production and purification
- Top-notch computational biology solutions/ analysis for immunomics, metabolomics, gene expression analysis in your target organism of choice, etc.
- Synthetic biology and bio-engineering projecting/consulting from gene design to (multi-gene) expression strategy.

media<u>scout</u>®

MediaScout[®] PrePacked Chromatography Columns

The demand for biopharmaceutical products in particular mAbs is increasing rapidly during the last years.

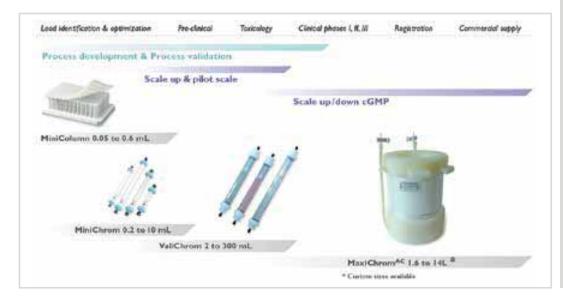
The necessity for pharmaceutical companies of being 'first on the market' combined with the need to cut development costs makes the application of HTS techniques and pre-packed chromatography columns in both downstream process development as well as clinical manufacturing indispensable.

Furthermore greater adoption of single-use and disposable systems in biomanufacturing and development is going to require improved downstream device innovation in particular for 'ready to use' chromatography columns.



Atoll GmbH develops manufactures and distributes MediaScout[®], an innovative chromatographic column technology platform for modern Downstream Process Development:

- 'High Throughput Process Development' (HTPD) seamless to Pilot Scale
- Identical column hardware for all chromatography media
- More than 6 year proven excellence in column packing
- OEM manufacturer for all major resin suppliers
- ISO 2001:2008 certified





Atoll GmbH

Ettishofer Str. 10 D-88250 Weingarten Phone: +49 (0) 751/56 12 10 Telefax: +49 (0) 751/56 12 17 0 info@atoll-bio.com www.atoll-bio.com

Contact person: Tim Schroeder, Dipl.-Ing.

Branches: 1 (USA)

Employees: 14

Production range/Services:

- MediaScout
- MiniColumn
- RoboColumn
- MiniChrom
- ValiChrom
- MaxiChrom
- ResiQuot

- Custom Production
- Proteins/Peptides
- Supplier

Reference BIOPRO Baden-Württemberg



BERTHOLD TECHNOLOGIES GmbH & Co. KG

Calmbacher Str. 22 D-75323 Bad Wildbad Phone: +49 (0) 7081/17 70 Telefax: +49 (0) 7081/17 71 00 bio@berthold.com www.berthold.com/bio

Contact person:

Bernd Hutter

Branches:

Germany, Austria, Switzerland, Italy, France, Belgium, UK, USA, Japan, China, India, Australia

Employees: 85

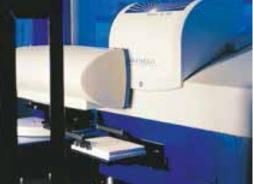
Production range/Services:

- Microplate luminometers
- Microplate fluorometers
- Microplate multimode readers
- Tube luminometers
- In vivo imagers
- Gel imagers
- Gamma counters
- HPLC radio monitors

Fields of action:

- Analytics
- Diagnostics
- Environmental Biotech
- Proteins/Peptides





Berthold Technologies

For more than 60 years Berthold Technologies, with headquarters located in Bad Wildbad, Germany, has developed instruments for analytical and biomedical research, for clinical diagnostics and for environmental monitoring.

The innovative products are characterised by their longevity, user friendliness and highest sensitivity. Thousands of sold plate readers, luminometers and gamma counters are proof of the high quality of the instruments.

With the Mithras multimode reader for microplates a unique measurement device with individually optimised optical paths ("DOPS") has been developed which is renowned in the field of GPCR research because of its outstanding BRET performance.

With the NightOWL Berthold Technologies has been one of the first providers of an imaging system to localise gene expression in living animals and whole plants.

The new NightSHADE LB 985 is the first imaging system fully dedicated to plant research.

The user is supported by a worldwide network of subsidiaries, distributors and service points.



Biametrics GmbH is a successful spin-off company at the University of Tuebingen and serves as a service provider and know-how carrier at the interface of biotechnology / pharmaceutics, medical engineering and life science analysis. The patented Biametrics technology includes label-free detection, surface chemistry and assay development for the time-resolved analysis of any kind of biomolecular interaction. For collaborations with market-leading companies Biametrics provides R&D services and licenses in the areas of IVD, life-science research, process control, and Homeland-Security. Besides these development services, Biametrics can also act as a consultant for the series production of sensor elements on the basis of labelfree technologies.

Based on innovative label-free biosensor technology, Biametrics develops in cooperation with / for customers analytical system solutions in the areas of

- Life science analytics & research
- Screening of biologics
- Point of need (PON) applications
- In-vitro diagnostics

Point-of-need Device



The Biametrics Point-of-need device is designed as a smart solution for your on-site applications.

- Allows for detection of any biomolecular interations
- Fast result can be obtained within minutes without need for sample treatment or thermostabilization
- Easy to use it doesn't need to be operated by specially trained personel
- Robust and cost-effective aside from point-of-need aplications, it is possible to use the device for teaching and educational purposes
- Handheld can be used anywhere where you would also use a laptop

Screening Device



The Biametrics Screening Device offers you the possibility to analyse thousands of different interaction simultaneously.

- It supports free scalable DNA, peptide or Protein microarrays
- Scalable sample volume from 250 to 1000 µL per measurement
- Integrated software for full kinetic evaluation of the biomolecular interaction can be customised towards your needs

Libiametrics

biomolecular interaction analysis

Biametrics GmbH

Auf der Morgenstelle 18 D-72076 Tübingen Phone: +49 (0) 7071/29 73 04 8 Telefax: +49 (0) 7071/29 57 72 mail@biametrics.com www.biametrics.com

Contact person:

Dr. Florian Pröll

Branches:

Life Science Analytics

Production range/Services:

Biosensors for life sciences and diagnostics

- Analytics
- Supplier

🗮 BIOPRO Baden-Württemberg 🛩



Bioassay - Labor für biologische Analytik GmbH Im Neuenheimer Feld 515 D-69120 Heidelberg Phone: +49 (0) 6221/4 33 88 90 Telefax: +49 (0) 6221/4 33 88 99 info@bioassay-online.de cords@bioassay-online.de

Contact person:

Dr. Sven-Michael Cords, COO

Employees: 15

Production range/Services:

- Bioanalytical services
- Potency assays (GMP)
- Safety assays (GMP & GLP)
- Assay development
- Assay validation
- Assay routine

Fields of action:

- Analytics
- Biotechnological Services
- Proteins/Peptides

Bioassay GmbH

Bioassay GmbH is an independent contract laboratory, specializing in the development, validation and routine performance of bioanalytical assays in the area of Pharmacology and Toxicology. We carry out qualified analytical services on the sound basis of our GMP & GLP certification, which provides an excellent framework for successful projects and routine bioanalysis.

Bioassay GmbH specializes in biological assays within the framework of the development & quality control of pharmaceutical and chemical products, and is focussing on potency assays under GMP as well as on safety assays under OECD guidelines (GLP).

The GLP & GMP conform procedure and documentation is the basis for the reliability of our services. This guarantees the acceptability of the data generated in our laboratories as part of the quality assurance of the products undergoing testing.

The inspection of quality standards carried out by regulatory authorities and customer audits



serves to encourage continuous improvement, inspire confidence and reinforce the transparency of our performance.

It goes without saying that we handle all customer-specific data and processes with the utmost confidentiality. This is an integral part of our philosophy.

We combine standardized processes with flexible organization, adapting constantly to the current needs of the market and our customers. This creates space for the enhancement of our service portfolio. Key global players as well as start-up companies in the pharmaceutical and chemical industries trust in the experience and dedication of our bioanalytical experts.





BioCat GmbH

BioCat GmbH is a private company founded in the year 2000. As a true solution provider, BioCat supplies innovative products and services for life science research in an applicationand customer-oriented way.

The product offering comprises a wide range of high-quality research reagents and cuttingedge technologies in the fields of genomics, proteomics and cell biology. For tissue-related applications, tissue microarrays as well as RNA, cDNA and proteins isolated from a wide variety of common and hard-to-obtain tissues are available. Fluorescent proteins, a large selection of antibodies, ELISA kits, cell-based assays, PCR and next generation sequencing reagents as well as tools for microRNA, epigenetics and stem cell research complement the portfolio.

The products and services provided have been developed by partners in Canada, Germany, Korea, Russia and the US. They are made available through BioCat to researchers in academia as well as in pharma and biotech industry.

Moreover, BioCat is aiming at the co-development of new products based on innovations generated in Germany, such as the production of protein arrays by Laser Induced Forward Transfer (LIFT) of proteins onto substrates.



BioCat GmbH

Technologiepark Im Neuenheimer Feld 584 D-69120 Heidelberg Phone: +49 (0) 6221/7 14 15 16 Telefax: +49 (0) 6221/7 14 15 29 info@biocat.com www.biocat.com **Contact person:** Dr. Michael Ehret **Employees:** 13

Production range/Services:

Reagents and services for life science research with focus on genomics, proteomics and cell biology including

- Tissue microarrays
- Gene silencing
- microRNA analysis
- Epigenetics
- PCR & qPCR
- DNA, protein, and cell arrays
- Libraries & clones (cDNA, ORF, BAC, 3'UTR, Promoter)
- DNA cloning & modification kits
- Sample preparation kits
- Antibodies & ELISA kits
- Fluorescent proteins
- Cell-based assays
- Apoptosis & signal transduction
- Transcription factor analysis
- Multiplex cytokine assays

- Analytics
- Custom Production
- DNA/RNA
- Proteins/Peptides
- Supplier

See BIOPRO Baden-Württemberg 🛩



BioChem GmbH

Daimlerstr. 5 b D-76185 Karlsruhe Phone: +49 (0) 721/97 37 0 Telefax: +49 (0) 721/97 37 222 biochem@biochem.de www.biochem.de

Contact person:

Dr. Jürgen Branke Technical Managing Director

Branches:

- Pharmaceutical industry
- Chemical industry
- Medical device industry
- Cosmetic industry

Employees: >60

Production range/Services:

Analytical testing of

- Microbiological
- Physico-chemical
- Molecular biological samples

Fields of action:

- Analytics
- Biotechnological Services

BioChem GmbH

- your analytical contract laboratory

In 1973 BioChem was founded by Dr. Walter Massmann († 1998), a medical specialist in pharmacology and microbiology who was a well acknowledged occupational medicine expert.

The origin of BioChem's laboratory activities started with the analysis of biological and microbiological parameters. Stepwise our analytical service portfolio was extended by adding a variety of chemical and molecular biological testing procedures during the 80's and 90's. In 1981 BioChem was registered as a limited company.



Due to continuous growth a new facility was set up and BioChem moved successfully into a state-of-the-art laboratory in 1988 which was partly modernized and renewed in 2005.

Nowadays, under the direction of BioChem's principal shareholder Dr. Ludwig Massmann, we are part of several internationally established business units which are consolidated within the BioChem Holding GmbH.

The expertise of more than 60 in-house experts as microbiologists, chemists, molecular biologists, biotechnologists combined with a comprehensive network of high professionals allows us to serve all of your needs as a competent, reliable and trust-



worthy partner for analytical quality control including stability control and developmental activities.

At BioChem you will find within our 3 core competencies of

- microbiological
- physico-chemical
- molecular biological

testing a widespread variety of different technologies established.

Sterility, bacterial endotoxin, microbial contamination testing are beside chromatographic, elemental or PCR analysis only some keywords giving an idea of our analytical portfolio.

Please visit www.biochem.de to see our complete areas of expertise.

BioChem established already in its early years the highest quality standard following current GMP- / GLP-regulations according different international requirements. BioChem is GMP-/GLP-certified as well as FDA-inspected and registered.













biomers.net is your service partner for all aspects of oligonucleotides. We offer you a broad product range from DNA primers over single- und multimodified complex oligonucleotides to RNA synthesis in various scales. Our interdisciplinary team with well proven expertise on the fields of nucleic acid chemistry and oligonucleotide production enables us to cater to your most special requirements. Our experienced staff will be pleased to assist you at all times with your questions around selection and use of oligonucleotides.

A highly automated production and quality control lab and state-of-the-art computer and database systems assure you fast order processing between electronic ordering through our online ordering system to the delivery of your custom-synthesized products via express mail service. As a fully independent company being managed by its owners we can give you a maximum on flexibility and efficiency due to lean hierarchies and fast decision making processes.



biomers.net GmbH

Söflinger Str. 100 D-89077 Ulm Phone: +49 (0) 731/7 03 96 0 Telefax: +49 (0) 731/7 03 96 11 info@biomers.net www.biomers.net

Contact person:

Dr. Matthias Resmini

Employees: 30

Production range/Services:

- Biopolymer synthesis
- Oligonucleotide custom synthesis

- Biotechnological Services
- Custom Production
- DNA/RNA



Reference BIOPRO Baden-Württemberg



BIOMEVA GmbH

Czernyring 22 D-69115 Heidelberg Phone: +49 (0) 6221/90 26 0 Telefax: +49 (0) 6221/90 26 90 t.pultar@biomeva.com

Contact person:

Dr. Thomas Pultar, CEO

Employees: 40

Production range/Services:

- Contract manufacturing of biopharmaceuticals according to cGMP
- Microbial fermentation
- Strain development
- Process development and optimization
- Cell banking
- Development and validation of analytical methods
- Process validation

Fields of action:

- Biotechnological Services
- Contract Research
- Custom Production
- Production Organisms
- Proteins/Peptides
- Therapeutics

BIOMEVA GmbH, a reliable and experienced provider of contract services in the biopharmaceutical industry, is dedicated to meeting the manufacturing needs for the production of microbially expressed protein products. Our current Good Manufacturing Practices (cGMP) production facility and extensive technical expertise provide the support to obtain regulatory approval. Since 1993 BIOMEVA has been producing more than 350 batches of cGMP- compliant material for over 30 customers worldwide. Partners benefit from BIOMEVA's track-proven operational expertise in the transfer, development, optimization, scale-up and validation of cGMP processes.

Large-scale production of Active Pharmaceutical Ingredients

Our Heidelberg (Germany), facility is specialized in the manufacture of active pharmaceutical ingredients expressed in microbial systems. Recombinant material on a clinical and commercial scale can be produced in batches of up to 1,000 L. This facility houses laboratories for E. coli cell bank production, characterization and storage, classified suites for fermentation, chromatography, bulk filling and QC laboratories. A Class 100/1,000 filling suite is maintained for bulk product filling.





Production and purification systems include the following:

- Fermenters with working volumes of 10 L, 100 L, and 1,000 L
- Continuous centrifugation
- High-pressure homogenizer
- Protein micro-filtration and ultra-filtration
- Sterile filtration
- Column chromatography
- Bulk product filling

Microbial Cell Banking

Master and working cell banks are manufactured, characterized and tested in state-of-the-art laboratories according to FDA and ICH requirements.

Quality Control

To support cGMP production activities, the quality control (QC) group ensures that all facilities, equipment and critical materials are under control and cGMP-compliant.

Quality Assurance

The mission of quality assurance (QA) is to ensure that all manufacturing at BIOMEVA fulfills cGMP requirements, and that we exceed clients' quality expectations. Our QA auditors provide inspection, auditing and monitoring of all production activities.



With more than 27 years experience BIOPHARM is a well-known innovator in the field of Regenerative Medicine. With our proprietary Growth Factor Platform Technology we can offer tailor made drug design for innovative products in the field of bone, cartilage and wound regeneration. With two major license deals in place (Phase I/II and Phase II) BIOPHARM has proven its unique market position and strong innovation pipeline.

BIOPHARM's business case covers drug discovery and early stage development and all stages of pre-clinical development. We strive to out-license our projects to partners after pre-clinical proof-of-concept for further clinical development and commercialization.

BIOPHARM's current projects include the development of a bioactive scaffold for wound healing in cooperation with the Freudenberg Group (Germany), a bioactive bone cement incorporating the latest innovation of our growth factor platform technology (in cooperation with University of Jena and funded by the Germany Ministry of Education and Research) and the development of a novel biomarker for liver fibrosis (performed by PW Technologies GmbH, a sister company of BIOPHARM GmbH).

INVESTMENT & PARTNERING

Establishing partnerships and alliances is a key business strategy of BIOPHARM. We are interested





in partners who share our passion for innovation in Regenerative and Personalized Medicine and are interested to work with us to fully exploit the potential of our unique and proprietary Growth Factor Platform Technology and associated expertise.

We have a proven track record of moving projects from early-stage research through to preclinical development. Our capabilities include world-class science, as well as an experienced staff and state-of-the-art laboratory facilities in the No.1 Biotech area in Germany. We invite potential partners to explore the unique opportunities of our current projects of the BIOPHARM product pipeline for further clinical development.

We seek strategic cooperations with academic institutions and companies in the Biotech, Pharma and Med-Tech industry to constantly supply our technology and product pipeline and to have access to complementary technology and development capabilities.

TECHNOLOGY SCOUTING

BIOPHARM understands what it takes to successfully identify potential technologies and product concepts. We have the expertise and capabilities to assess and examine whether earlystage developments bear a product potential addressing key markets.

BIOPHARM GmbH

Czernyring 22 D-69115 Heidelberg Phone: +49 (0) 6221/53 83 0 Telefax: +49 (0) 6221/53 83 20 info@biopharm.de www.biopharm.de www.pw-technologies.com

Contact person:

Dr. Frank Plöger

Employees: 30

Production range/Services:

- Regenerative Medicine
- Woundhealing
- Orthopedics
- Technology Scouting

- Biotechnological Services
- Contract Research
- Diagnostics
- Proteins/Peptides
- Therapeutics
- Tissue Engineering

🗮 BIOPRO Baden-Württemberg 🛩

BioRépair

BioRépair GmbH

Blumenstr. 4 D-74889 Sinsheim Phone: +49 (0) 7261/97 17 60 Telefax: +49 (0) 7261/97 17 61 info@biorepair.com www.biorepair.com

Contact person: Martin F. Trinkner

Branches:

Blumenstr. 4 74889 Sinsheim, Germany Sterneckstr. 55 5020 Salzburg, Austria

Employees: 5

Production range/Services:

- Parasitology
- Microbiology
- Point of care testing

Fields of action:

- Diagnostics
- Supplier



BioRépair[®] was founded in 1997 in the innovative BioRegio Rhein Neckar close to Heidelberg. In cooperation with universities and private institutes we develope and produce diagnostics for immunological, mikrobiological and parasitological detections. Our own research and development department guarantees for the output of new techniques and innovative diagnostics.

Our parasite concentration system (see picture) is one of the leading products in Europe to detect parasites, larvae and their eggs out of stool samples from humans and animals. BioRépair[®] offers diagnostics for human and veterinary labs.

Our main products are:

- Point of care testing
- Rapid tests
- Diagnostics for parasitology and microbiology
- Western blots for parasitology
- Products for veterinary diagnostics
- Research products (Acute phase proteins)

BioRépair is ISO 9001 certified – All our products are CE-marked

Product innovations in oncology and intensive care medicine

biosyn Arzneimittel GmbH is a private owned pharmaceutical company located in Fellbach near Stuttgart in the Federal Republic of Germany, founded in 1984. The company now has approx. 80 employees in Germany and in its subsidiaries in Switzerland, Austria and the USA.

biosyn Arzneimittel GmbH has specialised primarily in the fields of intensive care medicine and oncology. biosyn currently offers around 30 drugs approved in 22 countries worldwide.

biosyn markets world-wide pharmaceutical products and active pharmaceutical ingredients in the fields of trace elements, minerals, biologics and biotechnology, respectively.

biosyn Arzneimittel GmbH represents a classical pharmaceutical company with all necessary functions: manufacturing, regulatory affairs, marketing, distribution, finances. Furthermore the company operations are especially focused on R & D in product and clinical development.

The manufacturing of biosyn's proprietary active pharmaceutical ingredients is established in their own production facilities in Fellbach: Sodium selenite for injectable selenium (Selenase[®]) or



Sea snail Megathura crenulata (keyhole limpet)



As a research oriented pharmaceutical company biosyn focuses on the development of innovative biotech products. About 25 per cent of the annual turnover are invested in research for highly effective drugs based on new discoveries in molecular biology.

keyhole limpet hemocyanin (KLH) for the treatment of bladder cancer or as carriers for novel vaccines (IMMUCOTHEL®, VACMUNE ®). biosyn's laboratories in Fellbach are GMP-certified. biosyn Vertriebs AG in Balzers, Liechtenstein and the biosyn Corporation in Carlsbad, California, USA, are subsidiaries of biosyn. biosyn also has a scientific office in Austria.





biosyn Arzneimittel GmbH

Schorndorfer Str. 32 D-70734 Fellbach Phone: +49 (0) 711/5 75 32 00 Telefax: +49 (0) 711/5 75 32 99 info@biosyn.de www.biosyn.de

Contact person: Dr. rer. nat. Thomas Stiefel

Branches:

Wien (Austria) Balzers, Liechtenstein (Switzerland) Carlsbad, California (USA)

Employees: approx. 80

Production range/Services: Hemocyanin (KLH), IMMUCOTHEL[®], VACMUNE[®], cytostatics, hormone antagonists,

selenium compounds

- Agriculture/Food
- Analytics
- Diagnostics
- Proteins/Peptides
- Therapeutics

😽 BIOPRO Baden-Württemberg 🛩



BioTeSys GmbH

Schelztorstr. 54-56 D-73728 Esslingen Phone: +49 (0) 711/31 05 71 50 Telefax: +49 (0) 711/31 05 71 51 bts@biotesys.de www.biotesys.de

Contact person:

Dr. Jürgen Bernhardt

Employees: 17

Production range/Services:

- Cell based test systems (Uptake, Bioavailability, Effects, Cytotoxicity, automated cell culture processes)
- Intervention studies for scientific substantiation of products focused on nutrition (NEM, EBD, functional food) and cosmetics
- Analytics focused on HPLC and Photomety (various biological samples/ botanicals)
- In vivo / in vitro scientific substantiation of ingredient/product effects
- In vitro Toxicity testing

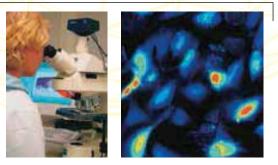
Fields of action:

- Agriculture/Food
- Analytics
- Biotechnological Services

Founded in 1999 as a spin-off of the University of Hohenheim, BioTeSys GmbH is nowadays a highly productive company certified according to ISO 9001:2008 in the sectors analytical chemistry, cellbased test systems and clinical studies. Additionally, the sector analytical chemistry has been accredited according DIN IEC 17025:2005 since 2003.

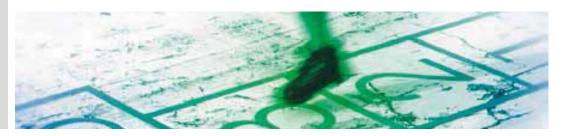
The range of services includes screening methods for measuring the bioactive potential of substances or substance mixtures by means of HPLC or photometry (accredited according to DIN / EN ISO IEC 17025:2005), in vitro test procedures using single cell cultures, cocultures and organotypic culture models as well as planning, coordination and conduct of clinical studies in the area food, dietary supplements, dietary foods for special medical purposes, cosmetics and consumer health care / OTC.

BioTeSys provides a service concept with a modular structure. The interdisciplinary team of experienced and motivated staff members form the core. A number of selected and reliable cooperation partners complete this team. This allows that extensive and complex task assignments, such as multifaceted analytical requests (coupled-mass GC/LC-, MS-ICP-, NMR-, mIR-methods, etc.), can be reliably processed. By involving medical specialists, specialised clinics or a certain group of test subjects, BioTeSys can offer a wide range of options in the field of clinical studies. BioTeSys can also provide assistance by consulting a specialist



solicitor, if legal issues regarding product descriptions or marketing need to be taken into consideration. Whenever external partners are called upon, our team will plan and organise all necessary services as well as prepare scientific reports based on the data obtained. If expert opinions should be required, BioTeSys can arrange these through its well-established links to universities. This highly competitive efficient concept allows us to offer our customers a highly flexible and time-optimised service of high quality at favourable terms.

As reliable service provider BioTeSys stands for quality. The advantages of an external service provider are obvious: You save time, since we are working with state-of-the-art technology and the latest know-how at BioTeSys. You save money, as you no longer need to continuously modernise costly in-house analysis technology and finally, most importantly, your business and its staff can fully focus on their actual core competences. A team of young, highly-motivated staff members will continue to ensure that properties are turned into advantageous features.



BioTissue Technologies GmbH

BioTissue Technologies is an innovative biotechnology company manufacturing and distributing biological tissue replacement products in the medical market. Since 1997 BioTissue Technologies has been specializing in the manufacture of autologous cell-based tissues as well as in advanced cell-free implants for tissue regeneration. At the moment BioTissue Technologies is active in two specialist areas: orthopaedics/trauma surgery and dental/maxillofacial surgery.



Products

BioSeed®-C is an autologous three-dimensional chondrocytes graft which is grown from the patient's own cartilage cells. Indications are traumatically conditioned articular cartilage defects and early stages of arthritis. The patented, stable and three-dimensional matrix can also be used in arthroscopic surgery. Up to now more than 3000 patients have been treated successfully.

chondrotissue[®] is an advanced scaffold for intra-articular application in order to regenerate traumatic or degenerative cartilage defects. This product is a cell-free, off-the-shelf implant that is to be used in combination with microfracturing, since it uses the chondrogenic potential of stem cells from the subchondral bone. Thanks to a combined technology the scaffold is stable and flexible at the same time, allowing an arthroscopic and secure fixation.

BioSeed[®]-Oral Bone is a bone graft cultivated from the patient's own cambium cells in the periosteum. The graft consists of a complex three-dimensional cell system based on the patient's vital cells. For over 10 years, BioSeed®-Oral Bone has been used in jaw bone augmentation, such as sinus lift operations, but also in lateral onlay grafts and periodontology.

The 3D-grafts are produced according to European legislation in a GMP laboratory, specially developed for cell cultivation and managed under strict criteria.

Research

BioTissue Technologies works together with leading scientific centres in the field of orthobiology, in particular with the 100% subsidiary TransTissue Technologies GmbH in Berlin, which is in close relation with various research departments of the Charité University Hospital, the Freiburg University Teaching Hospital, the University Hospitals in Heidelberg and Münster as well as with the ETH Zürich.



BioTissue Technologies GmbH

Engesserstr. 4b D-79108 Freiburg im Breisgau Phone: +49 (0) 761/7 67 65 80 Telefax: +49 (0) 761/7 67 64 30 eszter.tanczos@biotissue.ch www.biotissue.de

Contact person: Dr. Eszter Tanczos

Branches:

BioTissue AG Zürich / TransTissueTechnologies Berlin

Employees: 19

Production range/Services:

BioSeed®-C: autologous threedimensional chondrocyte graft BioSeed®-Oral Bone: autologous three-dimensional jaw bone draft chondrotissue®: cell free cartilage implant

- Cells/Cell Lines
- Therapeutics
- Tissue Engineering

🗮 BIOPRO Baden-Württemberg 🛩



The Microplate Reader Company

BMG LABTECH GmbH

Allmendgrün 8 D-77799 Ortenberg Phone: +49 (0) 781/96 96 80 Telefax: +49 (0) 781/96 96 86 7 germany@bmglabtech.com www.bmglabtech.com

Contact person:

Frau Sabine Schillinger

Branches:

USA, UK, France, Japan, Australia

Production range/Services:

- Microplate readers
- Protein-Protein-Interaction
- Microbial Growth
- Food Chemistry
- Antioxidants
- Migration
- GPCRs
- Membranes
- Aggregation/Adhesion
- SNP Genotyping

Fields of action:

- Analytics
- DNA/RNA
- Proteins/Peptides



BMG LABTECH GmbH engineers and produces highly sensitive microplate readers. In the year 2011 BMG LABTECH moved from their location in Offenburg to their new building in Ortenberg in the Black Forest. The latest masterpiece of the German engineers is the unique monochromator system with adjustable bandwidths. This technology is integrated in the multimode microplate reader named CLARIOstar.

The portfolio of BMG LABTECH includes multimode microplate readers like the FLUOstar, which measures all non-radioactive methods like fluorescence, luminescence, absorbance; readers dedicated for absorbance measurements only as well as the high-end reader for high throughput screening like the PHERAstar FS.







Boehringer Ingelheim Biopharmaceuticals GmbH

The Boehringer Ingelheim group is one of the world's 20 leading pharmaceutical companies. Headquartered in Ingelheim, Germany, it operates globally with 145 affiliates and more than 46,000 employees. Since it was founded in 1885, the family-owned company has been committed to researching, developing, manufacturing and marketing novel medications of high therapeutic value for human and veterinary medicine.

Boehringer Ingelheim Biopharma Contract Manufacturing is now represented by its new brand Boehringer Ingelheim **Bio**XcellenceTM.





As a leading biopharmaceutical contract manufacturer with more than 35 years of experience – we have brought more than 20 molecules to the biopharmaceuticals market. All types of services from mammalian cell line or microbial strain development to final drug production can be delivered within a one-stop-shop concept.

Boehringer Ingelheim delivers services for preclinical development up to global market supply with a strong commitment to its customers at its manufacturing facilities for mammalian cell culture and microbial fermentation.

Boehringer Ingelheim has many years of experience in multiple molecule classes such as monoclonal antibodies, recombinant proteins, interferons, enzymes, fusion molecules and plasmid DNA. Furthermore, high-titer platform technologies for new antibody mimetic formats such as scaffold proteins and antibody fragments are available for the manufacture of customer.

Boehringer Ingelheim can secure product supply globally and throughout the entire product lifecycle-transferring customer projects at any stage, delivering to almost any scale, to any market and thereby makes outsourcing easy.

Boehringer Ingelheim

Boehringer Ingelheim Biopharmaceuticals GmbH

Binger Str. 173 D-55216 Ingelheim Phone: +49 (0) 6132/77 0 Telefax: +40 (0) 6132/77 98 28 7 bioxcellence@boehringeringelheim.com www.bioxcellence.com

Contact person: Dr. Julia Knebel

Branches: 3 biopharmaceutical manufacturing facilities: Germany, Austria, USA Biopharma Development and Manufacturing Site Germany: Biberach an der Riss, Baden Württemberg

Employees: 46,000

Production range/Services: Own Biopharmaceuticals: Actilyse[®] / Metalyse[®] / Imukin[®] / Beromun[®]

- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- DNA/RNA
- Production Organisms
- Proteins/Peptides
- Therapeutics

🗱 BIOPRO Baden-Württemberg 🛩



CANDOR Bioscience GmbH

Simoniusstr. 39 D-88239 Wangen im Allgäu Phone: +49 (0) 7522/7 95 27 0 Telefax: +49 (0) 7522/7 95 27 29 info@candor-bioscience.com

www.candor-bioscience.com

Contact person:

Dr. Peter Rauch, Dr. Tobias Polifke

Employees: 7

Production range/Services:

- Antibody stabilizers
- Conjugate and coating stabilizers for ELISA kit production
- Optimizers for immunoassays
- Solutions for immunoassays
- customized buffer production from 1 liter to 2000 liters batch volumes
- ELISA development, optimization and validation

Fields of action:

- Analytics
- Biotechnological Services
- Custom Production
- Diagnostics
- Supplier
- Proteins/Peptides



CANDOR Bioscience GmbH The ELISA Experts

CANDOR Bioscience GmbH is an internationally oriented, innovative, profitable and privately owned enterprise.

CANDOR develops, produces and distributes a comprehensive selection of premium solutions for immunoassays.

CANDOR offers more than 50 different products including optimizers, blockers, stabilizers and buffer solutions for immunoassays. By using these solutions the reliability of results can be improved, the assay can be simplified and process times can be reduced.



CANDOR quality comprises highest product quality, highest quality standards and demanding quality control in production in addition to comprehensive product support and customer service.

The company is certified according to DIN EN ISO 9001:2008.





cecolabs UG was founded in late 2011 by Daniel Kühner, Doğan Doruk Demircioğlu and Prof. Dr. Friedrich Götz, as a spin-off company of the chair of microbial genetics at the Interfaculty Institute of Microbiology and Infection Medicine Tübingen (IMIT).

We are primarily specialized in the isolation and purification of ultrapure bacterial cell walls (murein or peptidoglycan (PGN)) from all types of bacteria (gram-negatives and positives) and its fragments (e.g. monomers – hexamers up to polymers) via our newly developed technique called Peptidoglycan-Next Generation Isolation (PGN-NGI). This technology also enables us to offer fast and accurate peptidoglycan analysis services, which also include the analysis of its amino acid composition or its wall teichoic acid (WTA) content. This gives our clients an opportunity to analyze putative alterations in the composition of these bacterial cell walls within a short time. Our scientists additionally support our clients in interpreting the obtained results. These analysis, using LC/MS, UPLC and ÄKTA systems, are of great importance for, amongst other things, the decoding of alterations in the cell walls of antibiotic resistant bacteria. In addition, our cell wall components can be utilized in immunological studies (inflammation, allergies) or as adjuvants in vaccine development.

Our standard portfolio includes whole cell wall extracts (so called crude extracts, which consist of the whole macromolecule PGN), PGN fragments in different package sizes and cell wall enzymes, e.g. lysostaphin. Our ultrapure cell wall components, as well as our services, are available to scientists all around the world.

Secondarily, we also offer other chemical compounds, e.g. Pam3Cys, Pam2Cys and others, which are utilized in various fields of research (e.g. toll-like receptor research), as adjuvants and many more.

We continuously extent our product portfolio. Please visit us on www.cecolabs.de





cecolabs UG

Waldhäuser Str. 70/8 D-72076 Tübingen Phone: +49 (0) 7071/29 77 61 9 Telefax: +49 (0) 7071/29 50 65 info@cecolabs.de www.cecolabs.de

Contact person:

Daniel Kühner Doğan Doruk Demircioğlu

Employees: 6

Production range/Services:

- Peptidoglycan analysis
- Peptidoglycan isolation
- Enzymes
- Isolation of microbial compounds
- Adjuvants

- Analytics
- Biotechnological Services
- Custom Production
- Production Organisms

Reference BIOPRO Baden-Württemberg



CeGaT GmbH

Paul-Ehrlich-Str. 17 D-72076 Tübingen Phone: +49 (0) 7071/5 65 44 00 Telefax: +49 (0) 7071/5 65 44 22 info@cegat.de www.cegat.de

Contact person:

Dr. med. Dr. rer. nat. Saskia Biskup

Employees: 45

Production range/Services:

- Molecular Genetics Diagnostics: Sequencing of single genes, interpretation of data and medical report
- Next-Generation-Sequencing (NGS): Sequencing of genomes, exomes, transcriptomes, etc. on SOLiD 4 and SOLiD 5500xl, bioinformatic analysis of data
- Diagnostic Panels: Parallel sequencing of all genes related with a certain disease by NGS and medical report
- Customized FISH assays

Fields of action:

- Analytics
- Bioinformatics
- Biotechnological Services
- Diagnostics
- DNA/RNA

CeGaT, Center for Genomics and Transcriptomics, is a sequencing and diagnostics company. All related services are performed in-house. We offer:

1. Next-Generation-Sequencing:

CeGaT is applying the HiSeq 2500 (Illumina) and SOLiD 5500xl (Life Technologies) Platforms for Next-Generation-Sequencing. Next-Generation-Sequencing enables rapid and cost efficient sequencing of up to 600 Giga-bases per run. CeGaT sequences DNA and RNA of humans, animals, plants and microorganisms. Depending on the particular project, Exomes, Transcriptomes, Epigenomes, microRNA or complete Genomes are deciphered. In addition to pure sequencing, extensive bioinformatic analysis of the generated data is offered.

2. Molecular Diagnostics:

CeGaT offers genetic testing for all known disease-causing variants in the human genome. This testing comprises Sanger-Sequencing, analysis of the data and issuing of a medical report. Two 96-Capillary Sequencers are used for sequencing.

3. Diagnostic Panels:

CeGaT has developed Diagnostic Panels in collaboration with its clinical partners. These Diagnostic Panels enable a massive parallel sequencing of all genes associated with a certain





disease by NGS. The obtained data are analysed and all variants being found are validated on the capillary sequencer. Using Diagnostic Panels is significantly faster and less expensive than sequencing the single genes of a certain disease. It also increases the probability to detect the genetic cause of the illness.

CeGaT is currently offering more than 97 Diagnostic Panels covering over 1,000 Genes for the following diseases:

- Brain Development Disorders
- Cardiac Diseases
- Ciliopathies
- Connective Tissue Disease
- Epilepsies & Migraine
- Eye Diseases
- Hearing Loss
- Ion Channel Diseases
- Metabolic Diseases
- Mitochodriopathies
- Neurodegenerative Diseases
- Neuromuscular Diseases
- Rasopathies
- Tumor Syndromes

4. Customized FISH-Assays:

CeGaT offers the development of FISH (fluorescence in-situ hybridisation) assays for in-situ detection of amplifications, deletions, and translocations for nearly all gene loci, tailored to individual needs. Cellca: partner of the pharmaceutical industry

Cellca is a recognized leader in custom developments for biologics production for the pharmaceutical industry. Cellca is specialized on upstream processing in particular the protein production in mammalian cell lines. Cellca works for customers worldwide for business or research purposes.

Competitive technology platform with valuable benefits

Based on its in-depth expertise, know-how and intellectual property, Cellca has established a unique technology platform, which is one of the most competitive systems available. It is characterized by high efficiency regarding quality, quantity and short development time, robustness and direct process scalability. So, customers and partners benefit from reduced cost of goods, reduced risks and a faster time-to-clinic / market.

Products and services: delivering productivity

Cellca offers the following products and services for the production of biopharmaceuticals from mammalian (CHO) cell cultures:

- Cell line & process development
- Optimization of existing processes and media.
- For all types of antibodies and fusion proteins.

The cell line development leads to processes providing high protein concentration and high protein quality. All process parameters are defined at





large liters scale in order to ensure process transfer and scale-up to the production scale.

Proven track record

Cellca has a proven track record of successful projects highlighting the promised strength and benefits:

- More than 30 projects have been completed,
 > 95% deliver 3 g/L or more.
- Within six months Cellca can deliver a research cell bank starting from DNA together with a direct scalable process that produces
 > 3 g/L within 12 to 14 days cell fed batch culture.
- Cellca can improve the yield of an existing process by a factor of 2 to 3 in 3 5 months.
- Cellca's technology platform eliminates the need for expensive scale-up studies.
- In all projects comprising all types of antibodies and fusion proteins, targets had been (over)achieved.

Cellca: worldwide partnering for success

Cellca is in close cooperation with partners worldwide: small and large pharma companies, universities and research institutions. Important industrial partners are GE Healthcare Bio-Sciences Corp., Protagen AG, and Rentschler Biotechnologie GmbH.

Whatever you are looking for, Cellca understands your needs and finds the right solution.



Cellca GmbH

Uhlmannstr. 28 D-88471 Laupheim Phone: +49 (0) 7392/9 66 48 10 Telefax: +49 (0) 7392/9 66 48 29 info@cellca.de www.cellca.de

Contact person:

Hugo de Wit

Employees: 20

Production range/Services:

Custom developments for the production of biopharmaceutical proteins from mammalian (CHO) cell cultures:

- Cell line & process development
- Optimization of existing processes and media
- For all types of antibodies and fusion proteins.

- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- Custom Production
- Production Organisms
- Proteins/Peptides
- Therapeutics

🗮 BIOPRO Baden-Württemberg 🛩



Cellendes GmbH

Markwiesenstr. 55 D-72770 Reutlingen Phone: +49 (0) 7121/1 59 40 0 Telefax: +49 (0) 7121/1 59 40 99 info@cellendes.com www.cellendes.com

Contact person:

Dr. Brigitte Angres

Employees: 4

Production range/Services:

- Biomimetic hydrogels for 3-D cell culture
- Custom production of hydrogel reagents
- 3-D cell-based assay development

Fields of action:

- Cells/Cell Lines
- Supplier
- Tissue Engineering

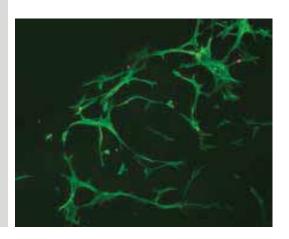




Cellendes is a life science company offering a comprehensive technology for the controlled design of cell environments in 3-D cell culture. This technology serves the increasing demand for cell-based assays with a closer ressemblance to the environment in the living organism. Areas of application include basic research, drug development and biomedical engineering.

The *3-D Life* Technology: Cell Environment Design at Your Fingertips!

Cellendes' *3-D Life* products are a toolbox of reagents which provides high flexibility to the user in composing hydrogels with biomimetic modifications as desired for each specific cell culture. Due to the inert nature of the basic material and its high capacity for modification



with bioactive factors, *3-D Life* hydrogels achieve high performance to suit many applications.

Main Features of 3-D Life Hydrogels:

- Defined composition of biologically inert synthetic polymers and biopolymers
- User-controlled biomimetic modifications (e.g. peptides, proteins)
- Wide range of ligand density (up to 5 mmol/l)
- Tunable gel strength
- Choice of non-degradable, user- degradable and cell-degradable gels or combinations thereof
- Amenable to automation for multi-well plate dispensing
- Injectable cell delivery and in situ gel formation

Applications:

- 3-D cell cultivation in basic research
- 3-D cell-based assays and tissue models for drug screening
- Development of 3-D biomaterial for regenerative medicine and medical engineering

Cellendes seeks collaborations with academic and industrial partners to explore the use of the *3-DLife* technology in complex cell-based assays and tissue models for drug screening as well as in biomedical engineering. CellGenix GmbH is a biotech company active in the field of cellular therapies and regenerative medicine. CellGenix was founded in 1994 and is located in Freiburg, Germany, where it operates a state-of-the-art GMP manufacturing facility. The company develops, manufactures and markets high-quality reagents for ex vivo cell culture. As a first company to obtain a GMP manufacturing authorization for cell processing in Europe, CellGenix can build on more than 15 years of inhouse experience in clinical cell therapies.

High-quality Cell Culture Reagents

CellGenix has taken the lead in providing customers with high-quality GMP reagents that are suitable, safe and reliable to be used as ancillary materials in clinical ex vivo cell culture. For many years, CellGenix has developed and manufactured products according to GMP guidelines and under ADCF (Animal derived component-free) conditions. We have filed DMF (Drug Master File) for many of our products at the FDA and other major regulatory authorities. Conformance with the new USP (United States Pharmacopeia) General Chapter <1043> "ancillary materials for cell, gene, and tissue-engineered products" and USP <92> "growth factors and cytokines used in cell therapy manufacturing" supports our high quality claims.

Our products are used by leading experts and proven in clinical trials throughout the world.





CellGenix is continuously expanding its portfolio of serum-free media and reagents for ex vivo cell processing:

- Serum-free media for the cultivation of dendritic cells, hematopoietic stem cells, T-cells, NK-cells and mesenchymal stem cells and chondrocytes
- Preclinical-grade and GMP-grade cytokines for optimal growth support of differentiation of hematopoietic stem and progenitor cells, as well as dendritic cells, T-cells, NK-cells, MSC, ESC and iPS cells
- Teflon bag systems with unique properties for cell culture and cryopreservation

Quality Management System

To further demonstrate our commitment to continual improvement of quality and service we have entered into the certification process for DIN ISO 9001:2008, a globally recognized quality management system standard. The certification was monitored by the TÜV and covers development, production, storage and distribution of ex vivo cell culture reagents. Hereby, CellGenix extends existing standards of quality in GMP manufacturing to embrace companywide processes. On the basis of our quality standards as a reliable partner, we optimize quality, service and our daily delivery performance.

S CellGenix

CellGenix GmbH

Am Flughafen 16 D-79108 Freiburg Phone: +49 (0) 761/8 88 89 0 Telefax: +49 (0) 761/8 88 89 80 0 info@cellgenix.com www.cellgenix.com

Contact person: Prof. Dr. med. Felicia Rosenthal

Employees: 50

Production range/Services:

- Cell Culture Reagents and Tools
- Cell Therapy and Regenerative Medicine

- Cells/Cell Lines
- Supplier
- Therapeutics
- Tissue Engineering

See BIOPRO Baden-Württemberg 🗲



Cellzome GmbH

Meyerhofstr. 1 D-69117 Heidelberg Phone: +49 (0) 6221/13 75 70 Telefax: +49 (0) 6221/13 75 72 01 www.gsk.com

Contact person:

Dr. Gitte Neubauer

Employees: approx. 60

Fields of action:

- Analytics
- Proteins/Peptides
- Therapeutics

Cellzome is a leader in Chemoproteomics, a technology which monitors the interaction of small molecules with their protein targets under close-to-physiological conditions, directly in cells or tissues.

Cellzome was founded 2000 as a spin-off of the European Molecular Biology Laboratories (EMBL) and is located on the EMBL campus in Heidelberg, Germany. About 55 scientists and technical staff working at Cellzome represent 10 different nationalities and cover a variety of skill sets, ranging from physics, mass spectrometry and bioinformatics to cell biology, compound screening, and medicinal chemistry. As an independent company, Cellzome entered two drug discovery collaborations with the GlaxoSmithKline (GSK) Immuno-Inflammation therapy area, the first, initiated September 2008, focused on kinases and the second, initiated 2010, on epigenetic targets. The company was acquired by GSK in May 2012 and was integrated as fully owned GSK daughter company in GSK's Platform Technology and Sciences team.

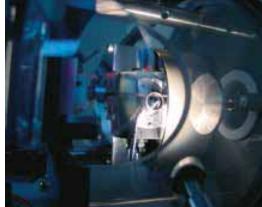
Cellzome's technology

Cellzome has pioneered the advancement of chemoproteomics to study the effects of active



small molecules on the proteome, the protein content of a cell or tissue, which comprises in excess of 10,000 different proteins. We apply chemoproteomics in a quantitative manner at various stages in drug discovery and development, from screening to selectivity profiling of drugs in different cell and tissue types. A complementary platform is used to map disease-relevant signalling pathways. This is achieved by the quantitative characterization of multi-protein complexes or mapping of posttranslational modifications, and the effect of drug candidates on these systems when applied in vitro or in vivo. Cellzome has published 10 landmark articles in the Nature journals which describe these approaches.







CETICS provides groundbreaking analysis technologies in the fields of in-vitro toxicity assays and in-vitro diagnostics.

With proprietary technologies, CETICS ensures a drastic simplification of analyses in

- diagnostics,
- personalized medicine, and
- toxicology.

Cost-effective high-precision infrared spectra can be obtained from biological samples such as blood serum, liquor, and cell culture supernatants with the patented AquaSpec MIR spectroscopy method. Complex information about the individual composition of every sample becomes available in digital form.

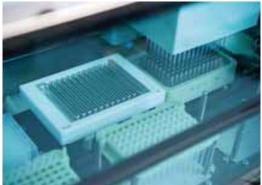
CETICS provides the market with completely new diagnostic possibilities and simultaneously ensures significant cost reductions, also for the quantitative determination of routine parameters.





But CETICS also offers applications in toxicology and personalized medicine. CETICS employs the automated FADU assay, where DNA strand breaks and DNA repair can be demonstrated very rapidly and, for many samples, fully automatically. This information is of central significance for the Chemical Risk Assessment for REACH as well as for cancer therapy.

Automated FADU systems can be combined with AquaSpec modules, thus greatly enhancing the retrieval of information in toxicology and personalized medicine.





CETICS Healthcare

Technologies GmbH

Schelztorstr. 54-56 D-73728 Esslingen a. N. Phone: +49 (0) 711/30 06 55 0 Telefax: +49 (0) 711/30 06 55 29 info@cetics-ht.com www.cetics-ht.com

Contact person:

Dr. Martin Winter

Production range/Services:

- TOXXs Analyzer: automated FADU genotoxicity assay
- SPECCs Analyzer: mid-infrared spectroscopy metabolomics and in-vitro diagnostics
- Toxicology
- Therapeutic Drug Monitoring
- Pharmaceutical Development

- Analytics
- Diagnostics
- DNA/RNA
- Supplier

Reference BIOPRO Baden-Württemberg



ChemCon GmbH

Engesserstr. 4b D-79108 Freiburg Phone: +49 (0) 761/55 97 0 Telefax: +49 (0) 761/55 97 44 9 info@chemcon.com www.chemcon.com **Contact person:** Dr. Jürgen Hain

Branches:

ChemCon America, Inc. 187 East Crystal Lake Ave., Suite 1005 Lake Mary, FL 32746, USA Phone: +1 (407) 323 1710 Telefax: +1 (407) 323 7078

Employees: 60

Production range/Services:

- R&D and chemical development
- cGMP manufacturing of API
- Reference-substances
- Organic chemistry
- Inorganic chemistry
- Bio-Inorganic products
- Neuroactive and cytotoxic substances
- Chemistry for R&D use
- Microbiological quality assurance and analytics
- CMC section support

Fields of action:

- Analytics
- Custom Production

Company Profile

ChemCon GmbH is specialized in Contract Research and Custom Synthesis in the field of small molecule organic and inorganic chemistry. Our strong point is the development of Synthetic Routes and Small Scale Manufacturing (mg to kg) of Fine Chemicals and Active Pharmaceutical Ingredients (API's) for preclinical use, all clinical phases and commercial material. Our main strength is the transfer from Laboratory R&D to cGMP chemistry in our FDA audited clean room facility and the work with cytotoxic material in injectible grade quality under full microbiological control.

ChemCon's services are covering the chemical and pharmaceutical industrie's needs from early stage development to routine API & HPAPI production.

- Elaboration of chemical processes and synthetic routes
- Implementation of synthetic routes from our customer and scale-up of chemical processes
- Development and custom synthesis of organic and inorganic chemical specialties and standards (e.g. multi-step synthesis; chemistry of natural products and protecting groups; stereoselective synthesis; ligand synthesis; complexation)
- cGMP-development for small molecules in pharmaceutics, generics, diagnostics and research chemicals
- Process transfer from R&D to cGMP with scale-up from mg to kg and process validation







- Commercial API manufacturing in small scale (mg to kg up to 1t/year) under cGMP with complete set of GMP documentation (TypeII Drug Master Files, Master Cleaning Records) in full compliance with all FDA and EU guidelines
- Stability and degradation studies
- Handling of toxic and air/moisture sensitive compounds
- Work at temperatures between -100 °C and 230 °C under pressure





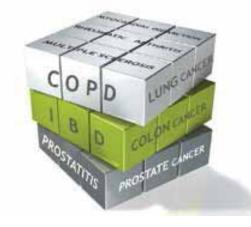
Comprehensive Biomarker Center GmbH (CBC)

The Center of Excellence for Genomic Biomarkers

Providing complete solutions from experimental design to biomarker signatures CBC is your partner for Clinical Research & Testing. With a focus on microRNAs from body fluids CBC offers full support for successful biomarker discovery, screening procedures, analyses, and validation.

Fields of activity:

CBC provides comprehensive biomarker services and solutions enabling early diagnosis, patient stratification, and monitoring of treatment responses. Non-invasive sample sources like whole blood, serum, plasma or urine are the key for early detection and therapeutic monitoring. Therefore CBC has established highly effective protocols for the extraction of total RNA from various sample sources.



Contract Research & Services:

Pre-Analytics

• DNA/RNA extraction from body fluid samples (Blood, Serum, Plasma, Urine, CSF, ...) & FFPE tissues

Biomarker Discovery

- Microarray (microRNA-, mRNA-, epigenetic Profiling)
- Next Generation Sequencing (Small RNA, Transcriptome, Exome/Subgenome)
 Biomarker Validation
- High-Throughput qRT-PCR, Multiplex Multibead Assay (Luminex, Firefly)
- Biostatistics
- Biomarker Signature Development, Multivariate Analysis

Quality:

CBC's broad expertise in biomarker signature development results from diverse biomarker studies that involved more than 5,000 clinical samples. CBC is operating SOP-based:

- Standardized, experienced RNA extraction services Fields
- Standardized QC & robust quantification for diluted samples
- Standardized Bioinformatics
- => ISO 17025 Certification

Take advantage of our expertise, optimized protocols, established technologies, and perform biomarker studies from clinical body fluid samples.



Comprehensive Biomarker

Center GmbH

Im Neuenheimer Feld 583 D-69120 Heidelberg Phone: +49 (0) 6221/91 433 10 Telefax: +49 (0) 6221/91 433 12 info@cbioc.com www.cbioc.com

Contact person:

Kathrin Waurich-Hähnlein

Employees: 15

Production range/Services:

- Preanalytics: DNA/RNA
 Extraction Services
- Biomarker Discovery on Microarray & NGS
- Biomarker Validation on qRT-PCR
- & Multiplex Multibead Assay
- Bioinformatics and Biomarker Signature Development & Verification
- Clinical Research
 - Organizations (CROs)
- Pharma/Biotech (R&D,
- Translational Research,...)
- Clinical Research

- Analytics
- Bioinformatics
- Biotechnological Services
- Diagnostics
- DNA/RNA

See BIOPRO Baden-Württemberg 🛩



Computomics GmbH & Co. KG

Sand 14 D-72076 Tübingen Phone: +49 (0) 7071/56 83 99 5 info@computomics.com www.computomics.com

Contact person:

Dr. Sebastian J. Schultheiss

Production range/Services:

- Genome Assembly/Annotation
- Transcriptome
- Metagenomics
- Genomic Selector[®]
- Epigenetics

Fields of action:

- Agriculture/Food
- DNA/RNA
- Bioinformatics

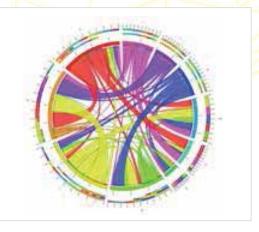
Computomics is a bioinformatics service provider for the analysis of next-generation sequencing data from plants and crops. Computomics offers a range of services starting with the assembly and leading up to complex interpretations. Their clients are scientists working in bioscience companies.

Computomics was founded by the two managing directors Dr. Sebastian J. Schultheiss and Dr. Tobias Dezulian in October 2012 together with four professors from the Max Planck Institutes in Tübingen and the University of Tübingen, who work in the fields of machine learning, bioinformatics and plant genomics.

Computomics' field of expertise is the analysis of genome sequencing data of crops such as cereals, fruits and vegetables for their clients in the agricultural industry. These analyses help their clients to grow high-yield plants, or strains with resistances to drought, parasites or high salt concentrations.

A sequencing project of a crop genome results in several terabytes of data. Using algorithms at the height of scientific possibility, Computomics' bioinformatics analysts assemble an entire plant genome from several million short fragments. It is quite a challenge to arrange the nucleotides in the correct order due to the many repetitions in plant genomes. Afterwards, proprietary algorithms reveal





the location of the sense-conveying "sentences" and "words" within the genomic sequence, i.e., the genes and exons that contain the construction blueprints for proteins. Bioinformatics analysts can also identify the sequence differences between individual plants as well as epigenetic markers – short methyl residues attached to nucleotides – which are induced by environmental signals and regulate the activity of genes.

Computomics is able to complete these analyses in the shortest possible time thanks to their specific experience of working with plant data and their proprietary analysis workbench in combination with their profound knowledge of bioinformatics methods. This inherent competitive edge entails that plant science companies from around the world regularly place orders with Computomics for scientific studies of their plants.



💽 crinotec

Crinotec GmbH – making analysis easier

Fields of Activity

Crinotec GmbH specializes in design of new analytical techniques for foodstuffs and beverages. The company is located in Tübingen, in the south of Germany near Stuttgart.

We provide custom designed analytical instruments based on bio- and chemosensors. Our main focus is the development of new analytical systems by combining new technologies with well tried sensor techniques for a wide range of application.

The in-house electronic design and prototyping in conjunction with custom software design guarantees an inter-coordinated workflow. Modern equipment allows a reliable validation of the developed analytical techniques.

Innovative Products

Proprietary developments in new sensor coatings and special designed analytical methods represent the basis for our actual product. With this Multi-Parameter Analysis System, designed for the use in the wine manufactu-





ring process, it becomes possible to determine important analytes both quickly and accurately. The usual methods almost had a lot of disadvantages – interference with the matrix, long analysis times and laborious techniques. This disadvantages can be avoided by Crinotectechnologies.

Wine represents a very complex matrix, therefore it is necessary to develop sensors having a negligible cross sensitivity.

Philosophy

Our ambition is to provide a great flexibility concerning new products and technologies. Therefore we attach great importance to a close collaboration with universities and partners in medium-sized enterprises. This guarantees a fast and successful design for many individual needs.



Crinotec GmbH

Sindelfinger Str. 3 D-72070 Tübingen Phone: +49 (0) 7071/63 97 400 Telefax: +49 (0) 7071/63 97 401 info@crinotec.de www.crinotec.de www.winealyzer.de

Contact person: Dipl. Chem. Andreas Fiedler

Employees: 4

Production range/Services:

- Chemosensors
- Biosensors
- Food and beverage analysis systems
- Development of analytical instruments
- Data acquisition systems
- Electronic design
- Software design

- Agriculture/Food
- Analytics
- Contract Research
- Custom Production

BIOPRO Baden-Württemberg

Curetis

Curetis AG

Max-Eyth-Str. 42 D-71088 Holzgerlingen Phone: +49 (0) 7031/4 91 95 10 Telefax: +49 (0) 7031/4 91 95 19 pr@curetis.com www.curetis.com

Contact person:

Oliver Schacht, PhD

Employees: approx. 50

Production range/Services:

- Unyvero[™] Solution (MDx instrument platform)
- Unyvero™ P50 Pneumonia Application
- Unyvero[™] ITI (Implant & Tissue Infections) Application in development

Fields of action:

- Diagnostics
- DNA/RNA

About Curetis

Founded in 2007, Curetis AG is a molecular diagnostics company which focuses on the development and commercialization of reliable, fast and cost-effective products for diagnosing severe infectious diseases. The diagnostic solutions of Curetis AG will enable rapid multiparameter pathogen and antibiotic resistance detection in only a few hours, a process that today can take up to days or even weeks with other techniques.

To date, Curetis has raised total funds of over € 49.1 million (~ USD 64 million). The company is based in Holzgerlingen near Stuttgart, Germany. Curetis has signed collaboration agreements with Heraeus Medical, Sanofi Pasteur and Cempra Inc. as well as several international distribution agreements.

About the Unyvero[™] System

The CE-marked Unyvero[™] System is a versatile hardware platform for the detection of a broad panel of bacteria and antibiotic resistances from a single sample in one run. It processes a disposable cartridge providing the necessary reagents to complete the analysis from sample to result. The



platform enables the DNA-based testing of all clinically relevant

samples in a fully automated, unsupervised analysis process requiring only few, quick manual preparation steps. The analysis thus can be performed with minimal operator time and without the need of skilled staff or special infrastructure. Thereby, clinically relevant information is available within about four hours to support an informed therapy decision as early as possible.

The first CE-marked UnyveroTM Cartridge, Unyvero TM P50, focuses on pneumonia testing and simultaneously analyses 39 DNA targets. The second UnyveroTM application for implant & tissue infections is already in product development. Cartridges for additional indications, such as blood stream infections and tuberculosis, are in preparation.



CureVac is developing an entirely new class of therapies based on a fundamental new understanding of the medical potential of mRNA. Using its RNA technology platform, CureVac is currently developing novel therapeutic mRNA vaccines (RNActive®) for cancer and prophylactic vaccines for infectious diseases and adjuvants based on non-coding RNAs (RNAdjuvant®) for enhancing the immune response of other vaccines.

The company has successfully completed Phase 1/2a studies with its RNActive® cancer vaccines in prostate cancer and non-small cell lung cancer (NSCLC). Results so far have shown that mRNAbased products are safe and capable of inducing balanced immune responses including humoral and cellular, Th1 and Th2 and effector and memory responses. In prostate cancer CureVac's RNActive® vaccine has been initiated Phase IIb study. In addition to developing its own pipeline, CureVac is collaborating with Sanofi Pasteur and In-Cell-Art on a \$33.1 million project co-funded by the Defense Advanced Research Projects Agency (DARPA) for the development of prophylactic vaccines in infectious diseases utilizing its RNActive® technology platform.



CureVac's approach is based on the discovery that when modified and formulated, the direct application of mRNA via injection can lead to the expression of functional proteins as well as the generation of a broad and potent immune response (RNActive[®] Technology). Until now, mRNA was regarded as being unsuitable for therapeutic applications because of its instability and difficult handling.

The company was originated in the laboratories of Professors Rammensee and Jung and spun off from Tübingen University in December 2000 to develop and commercialize mRNA as a therapeutic. In 2012 CureVac completed an €80 million financing round with its main investor, dievini Hopp BioTech Holding. To date, the company has raised approximately €145 million in equity financing.



CureVac GmbH

Paul-Ehrlich-Str. 15 D-72076 Tübingen Phone: +49 (0) 7071/9 20 53 0 Telefax: +49 (0) 7071/9 20 53 101 info@curevac.com www.curevac.com

Contact person:

Verena Lauterbach

Employees: 100

Production range/Services:

- RNActive[®] Immunotherapy in prostate and non-small cell lung cancer
- RNActive® prophylactic vaccines
- RNAdjuvant®
- Immunotherapy
- Prophylactic vaccines

- DNA/RNA
- Therapeutics



BIOPRO Baden-Württemberg



Cytonet GmbH & Co. KG Albert-Ludwig-Grimm-Str. 20 D-69469 Weinheim Phone: +49 (0) 6201/25 98 0 Telefax: +49 (0) 6201/25 98 28 holding@cytonet.de www.cytonet.de

Branches:

Heidelberg (Germany) Durham (NC, USA)

Employees: 40

Production range/Services:

• Liver cell therapy

Fields of action:

- Cells/Cell Lines
- Therapeutics





The Cytonet Group is an international biotechnology company with sites in Weinheim, Heidelberg, Germany and Durham, NC, USA. Cytonet has 40 employees and develops and produces cell-therapeutic products which offer alternatives for existent therapies, e.g. organ transplantations. In order to provide liver cell preparation for the treatment of urea cycle defects (UCDs), cells from donated livers (obtained from organ procurement organizations in the US) are isolated and processed in a complex procedure developed by Cytonet. The liver cells are isolated from non-transplantable donated livers.

Cytonet was founded by a demerger from the Roche Group in April 2000. The Dietmar Hopp family owns the majority of shares. Managing directors are Dr. Wolfgang Rüdinger and Dipl.-Kfm. Michael J. Deissner. The SELICA study on liver cell therapy as a treatment for inborn errors of liver metabolism in neonates and infants is currently ongoing in Germany, the USA and Canada.



Data Analysis & Consulting GmbH Get information from raw data

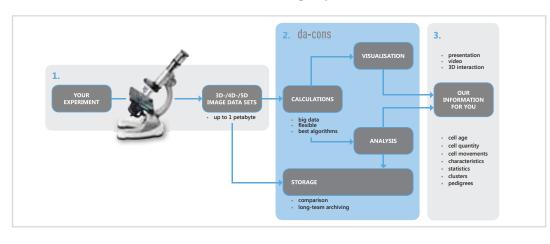
da-cons GmbH offers analysis, data management, archiving and visualisation of large multidimensional imaging data with a focus on life sciences. The company is located on KIT campus and Goethe-University campus Frankfurt.

Flexible image data analysis

The high technology service developed by da-cons allows tailored combinations of existing processes and algorithms in order to analyse multidimensional imaging data. Customers acquire image data sets with light or x-ray based imaging systems. Image raw data are analysed together with da-cons in individually tailored image processing workflows (see figure below, box 2). The desired information, contained in the image raw data, is extracted and given back to the customer.

Cluster computing allows fast complex image analysis workflows

Thanks to cooperation with several computer centres, the processing of large data amounts requires less time. This allows, e.g. in the con-text of biological experiments, to examine dynamics and development of organisms. Via analysis of these multidimensional data sets, da-cons is able





(data set kindly provided by Christian Mattheyer, Goethe University Frankfurt am Main, BMLS, Physical Biology)

to obtain temporal and spatial resolution of an object as well as an enormous richness of detail in microscope images.

Customer benefit

Customers do not have to adjust to hardware and software requirements, they can focus principally on their individual problem and the corresponding experiments. They save investments in hardware, software and manpower.

Examples from light sheet microscopy

Via cooperation with partners we can offer light sheet microscopy, visualisation and analysis from one hand. Analysis of 3D cell cultures, spheroids (see figure above). Tissues or roots from plants is possible. This can be done even with intransparent samples like human skin to evaluate blood capillary networks or elastin fibers.

da-cons

da-cons GmbH

data analysis & consulting

Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen Phone: +49 (0) 721/75 40 80 42 Telefax: +49 (0) 721/75 40 80 49 info@da-cons.de www.da-cons.de

Contact person:

Dipl.-Biol. David Haumann

Production range/Services:

- Multidimensional image analysis
- 3D Imaging in light sheet microscope
- Data management
- Data archiving
- Cluster computing

- Analytics
- Bioinformatics

BIOPRO Baden-Württemberg

O DIARECT

DIARECT AG

Bötzinger Str. 29 B D-79111 Freiburg Phone: +49 (0) 761/47 97 90 Telefax: +49 (0) 761/47 97 929 info@diarect.com www.diarect.com

Contact person:

Dr. Katharina Bonfig

Employees: 30

Production range/Services:

- Recombinant and native autoantigens
- Infectious disease antigens
- Protein stabilizers and blockers
- Colorimetric and chemiluminescent substrates

Fields of action:

- Diagnostics
- Production Organisms
- Proteins/Peptides
- Supplier

DIARECT AG

DIAgnostics by RECombinant Technology

DIARECT AG is a privately owned biotech company established in 1998. DIARECT's expertise lies in the development, standardized large-scale production and worldwide distribution of recombinant and native proteins.

The company is not only a leading manufacturer of autoimmune and infectious disease antigens, but also the European distributor of SurModics' protein stabilization reagents and blockers, BioFX substrates and Lumigen chemiluminescent detection technologies, thus providing the key components for the development of diagnostic end products. Today DIARECT serves customers in more than 40 countries worldwide.



Providing customers with products and services of constantly high quality is one of the cornerstones of DIARECT's philosophy. Therefore, all products are developed, produced and distributed according to a Quality Management System that is certified for compliance with ISO 9001 and 13485 standards.







DSM – Bright Science. Brighter Living.™

Royal DSM N.V. is a global science-based company active in health, nutrition and materials. By connecting its unique competences in Life Sciences and Materials Sciences DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, pharmaceuticals, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM's 23,500 employees deliver annual net sales of around € 9 billion. The company is listed on NYSE Euronext.

More information can be found at www.dsm.com.



DSM Nutritional Products GmbH Grenzach Emil-Barell-Str. 3 D-79639 Grenzach-Wyhlen Phone: +49 (0) 7624/90 90 Telefax: +49 (0) 7624/90 93 805 john.buckingham@dsm.com

Contact person:

www.dsm.com

Dr. John Buckingham

Production range/Services:

- Micronutrients
- Life Sciences

- Agriculture/Food
- Custom Production



EMC microcollections GmbH Sindelfinger Str. 3 D-72070 Tübingen Phone: +49 (0) 7071/40 74 0 Telefax: +49 (0) 7071/40 74 22 emc@microcollections.de www.microcollections.de

Contact person:

Dr. Renate Spohn

Employees: 22

Production range/Services:

- Parallel chemistry (solid phase and solution)
- Method development and feasibility studies
- Organic compound collections
- Screening compounds
- Peptides and peptidomimetics
- Immunochemicals

Fields of action:

- Analytics
- Biotechnological Services
- Custom Production
- Proteins/Peptides

The Company

EMC microcollections GmbH is a biotech company dedicated to the production of highly diverse combinatorial compound collections with drug-like quality for primary screening. Based on a wide repertoire of in-house solid phase and solution chemistry applying combinatorial techniques and methodologies, EMC offers an outstanding range of novel and structurally complex scaffolds. EMC's strong scientific and experimental background supports lead-optimisation with focussed compound collections.

EMC's experts in chemistry, biochemistry and biology have expanded the parallel chemistry process through development and acquisition of own targets, biological assays and screening technology.

Products

EMC's business objective is to develop and provide novel strategies for the drug discovery process. Our strong knowledge in chemistry and the commitment to drug-like quality accelerate the identification of hits, lead-optimisation and up-scaling. EMC offers the full range of products along the drug discovery process on a servicing or partnership basis:

- customer designed compound collections
- protocols for high-throughput synthesis
- analytically validated purified compounds
- lead structure design and optimisation
- nanobiotechnology
- regenerative biology and medicine
- third generation vaccines
- peptide chemistry
- immunochemicals



Management

EMC was founded in 1996 by Prof. Dr. Günther Jung, Prof. Dr. Jörg Metzger, Dr. Friedrich Stracke and Prof. Dr. Karl-Heinz Wiesmüller based on years-long expertise in automated high-throughput synthesis and medicinal chemistry, assay development, peptide and protein chemistry, bioorganic chemistry, immunochemistry and combinatorial compound libraries. The ExploSYS GmbH and its Institute for Exploratory Systems was founded in 2005 with the aim to provide research and services on the edge between mathematical modelling and policy making.

Decision modelling for health economics

ExploSYS brings together biotechnology, economics, epidemiology, statistics and informatics to develop cutting edge mathematical modelling technology capable of realistically assessing health policy and intervention scenarios. The interactive and high performance simulators are used for comparative effectiveness analysis and risk management, helping to achieve optimal impact on health economics & outcomes research. The ExploSYS experts assist pharmaceutical and biotechnology decision makers on a high scientific level, acting "what-if" scenarios to the end. This results in reliable planning, lower costs and higher margins of safety.

Exploratory modelling and visualisation

ExploSYS research and services is centred around the concept of exploratory modelling. This iterative and adaptive model development process involves the handling of a large number of models and simulation results



and requires a set of advanced software tools: Domain specific languages and graphic editors help to express and revise models. Parallel simulation and sampling algorithms for deterministic and stochastic models allow to generate a large number of model evaluations.

Exploratory visualisation, data mining and reporting help to translate simulation results into arguments for policy making. ExploSYS has successfully applied its exploratory tools to health- and biotechnology-related policy problems, e.g. for pandemic intervention planning, for economic evaluation of vaccination strategies, for risk assessment of antiviral resistance or for the optimization of food supply chains.

ExploSYS exploratory systems

ExploSYS GmbH

Otto-Hahn-Weg 6 D-70771 Leinfelden-Echterdingen Phone: +49 (0) 711/7 56 08 01 Telefax: +49 (0) 711/7 58 50 11 info@explosys.de www.explosys.de

Contact person:

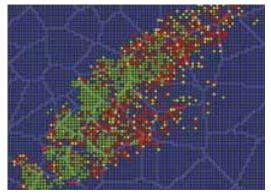
Dr. Markus Schwehm

Production range/Services:

- Computational modelling
- Interactive simulation software
- Parameter sensitivity analysis
- Health economic evaluations
- Data analysis & visualisation
- Bayesian & Markov methods

Fields of action:

Bioinformatics





🗮 BIOPRO Baden-Württemberg 🛩



FRUTAROM

Savory Solutions GmbH Leobener Str. 71 D-70469 Stuttgart Phone: +49 (0) 711/89 99 47 0 Telefax: +49 (0) 711/89 99 40 0 sginfo@frutarom.com www.frutaromsavory.com

Contact person:

Dr. Christian Hertel

Employees: 22

Production range/Services:

- Starter cultures for food and feed industry
- Contractual manufacturing

Fields of action:

- Agriculture/Food
- Custom Production
- · White Biotechnology



Frutarom Savory Solutions is one of Europe's

leading manufacturers of meat starter cultures.

Its continuous R&D efforts have enabled the

company to bring several innovative starter cul-

tures to market in recent years. Starter cultures

for the food industry have been developed and

Frutarom Savory Solutions has its own research

Both the production of the individual strains as

the complete starter culture is in our hands. To ensure everything is harmonized we also offer

complementary ripening agents and seasonings.

This way optimally integrated solutions are devel-

oped under the one roof - which is unique in

Team includes experienced food technologists,

Europe. Our interdisciplinary R&D Cultures

and development centres for starter cultures.

manufactured since 1989.

Introduction



microbiologists and biotechnologists. The team's know-how and years of expertise come together in our starter cultures.

Theory and practice are joined in our International Technology Center (ITC) – ultimately each starter culture has to prove itself in use. We have specialists and appropriate pilot plant production facilities in Germany and in Parma in Italy. In our pilot plant facilities we run small scale tests prior to large industrial trials to fully understand what happens in practice, comprehend the quality and the flavour impact. The best results are achieved when the starter culture is tailored to the end product. Since there are numerous types of raw sausages and raw ham with many different regional varieties, we have developed a wide range of starter cultures as each starter culture has its own profile of different properties.

The foodstuff and feed market require high standards of product safety and quality. To guarantee this, FRUTAROM Savory Solutions GmbH is certified according to IFS 6.

The focus of our starter cultures is on fermented meat products; however we also produce successfully cultures for agriculture, baking, dairy products and vegetable juice.



a Brand of FRUTARON

GATC Biotech AG

GATC Biotech is Europe's leading service provider of DNA sequencing with more than 10.000 academic and industrial customers worldwide. For over two decades, we have offered sequencing and bioinformatics solutions from single samples up to large scale projects. GATC Biotech has sequenced more than 5 million samples, ten thousands of bacterial, plant and other whole genomes as well as hundreds of whole human genomes.

Having Agilent and Illumina Certified Service Provider status, GATC Biotech offers true multiplatform sequencing using all leading sequencing technologies in its own labs: Sanger Sequencing with a fleet of 16 ABI 3730xl, Next and Third Generation Sequencing on several Roche GS FLX System, Illumina HiSeq 2000, Illumina MiSeq and Pacific Biosciences' PacBio *RS*.

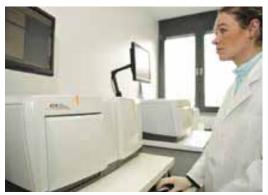
In order to evaluate these immense data quantities professionally, GATC Biotech keeps its own IT farm. It consists of over 160 servers – that is more than 900 processors in total. In addition, there is over 1,8TB main memory and 360TB fix-disk storage available. For instance, the Illumina HiSeq 2000s generate up to 8TB per week of new data which is analyzed by the High Performance Cluster.





Headquartered in Constance, Germany, the company houses its ISO 17025 accredited Genome and Diagnostic Centre with a focus on Next and Third Generation sequencing. The European Custom Sequencing Centre located in Cologne focuses on Sanger Sequencing and serving as the logistical hub within Europe. All laboratories have highly integrated and fully automatic processing pipelines and enable full compliance with latest state-of-the-art quality standards. Since 2010, GATC Biotech has been a key supplier for the International Cancer Genome Project.

GATC Biotech's subsidiary LifeCodexx emphasises the development of clinically validated molecular diagnostic tests and offers a risk-free alternative to common invasive examination methods such as amniocentesis.





GATC Biotech AG

Jakob-Stadler-Platz 7 D-78467 Konstanz Phone: +49 (0) 7531/81 60 68 Telefax: +49 (0) 7531/81 60 81 customerservice@gatcbiotech.com www.gatc-biotech.com www.facebook.com/gatcbiotech www.twitter.com/gatcbiotech

Contact person:

Lisa-Annina Quintes

Branches:

Subsidiaries in France, Great Britain and Sweden

Employees: 140

Production range/Services:

Provider of DNA sequencing services and bioinformatics software

- Analytics
- Bioinformatics
- Biotechnological Services
- DNA/RNA

🗮 BIOPRO Baden-Württemberg 🛩



Genaxxon bioscience GmbH

Söflinger Str. 100 D-89077 Ulm Phone: +49 (0) 731/36 08 12 3 Telefax: +49 (0) 731/36 08 96 2 info@genaxxon.com www.genaxxon.com

Contact person:

Dr. Norbert Tröndle

Employees: 5

Production range/Services: DNA-Polymerases,

PCR-Mastermixes, qPCR, dNTPs, agaroses, growth factors, amino acid analysis service, peptide synthesis service, transfection reagent.

Fields of action:

- Analytics
- Biotechnological Services
- Custom Production
- DNA/RNA
- Proteins/Peptides
- Supplier

Genaxxon bioscience sees itself as a competent partner for life science customers who are looking for products and services from the molecular biology segment. This understanding is based on its broad customer base that was built up over 11 years of successful business. The company with its headquarter in Ulm is headed by Dr. Norbert Troendle, a biochemist with an MBA from the NIMBAS institute in Utrecht.

Genaxxon bioscience with its broad range of molecular biology and cell biology products and services was founded in 2002 by Dr. Norbert Troendle. The joint expertise of the employees, their laboratory experience and the knowledge about product sources enabled Genaxxon developing a comprehensive range of products that fit customer needs. To improve product quality and with that also customer satisfaction high emphasis is put on customer feedback and own quality control. As customers play an important role they will not end up at a meaningless hotline but will talk directly to one of the competent stuff at Genaxxon.

Renowned researchers from all over the world use Genaxxon products. Quite a number is mentioned in the scientific literature.

While our focus is on molecular biology products we have been able to develop new products like a special hotstart polymerase with proof-reading activity or qPCR-mastermixes



with a green dye for real-time PCR. A newer development is a non-viral transfection reagent for lipofection with siRNA and DNA. To meet the needs of our customers, Genaxxon bioscience applied for ISO 9001:2008 certification and got approval in December 2010.

Besides PCR and related products the peptide synthesis service and amino acid analysis service grew to an important part of Genaxxon bioscience business showing that quality and accuracy is important and well recognized by our customers around the world.

Products and quality are "made in Germany"due to the focus on regional products, delivery times are kept as short as possible. This preserves the environment: short transport routes avoid unnecessary CO2 emissions. Last year, Genaxxon BioScience could demonstrate its social engagement and donated a sum of money to the local relief operation "Drachenkinder". Gene Bridges GmbH, founded 2000 as a spin-off of the European Molecular Biology Laboratories (EMBL), commercialises the patented Red/ET Recombination technology. Red/ET Recombination, also referred to as λ -mediated recombination, allows fast and cost-effective modification of DNA molecules.

E. coli cells which express phage-derived protein pairs, either RecE/RecT from the Rac prophage or Red α /Red β from λ phage, can precisely alter target DNA by homologous recombination using short (50bp long) homology arms for the reaction.

In May 2004, Gene Bridges opened its Commercial Centre in the Technology Park in Heidelberg to offer customers the possibility to outsource DNA modification projects. Our team of DNA engineering specialists already performed customer projects for a great number of pharma and biotechnology companies as well as academic institutes. The main



business areas are "E. coli strain modification/ White Biotech" and the preparation of complex tailor-made DNA targeting constructs which are necessary for the preparation of "transgenic mouse models" in order to analyze the molecular mechanism of diseases like cancer or neurodegenerative disorders like Huntington disease.

Companies can alternatively license the technology for in-house use.



Gene Bridges GmbH

Im Neuenheimer Feld 584 D-69120 Heidelberg Phone: +49 (0) 6221/13 70 81 0 Telefax: +49 (0) 6221/13 70 82 9 contact@genebridges.com www.genebridges.com

Contact person:

Gary Stevens (Licensing) Dr. Harald Kranz (Services)

Employees: 12

Production range/Services:

- Red/ET kits
- Selection cassettes
- DNA engineering services

- Biotechnological Services
- Contract Research
- Custom Production
- DNA/RNA
- Supplier
- White Biotechnology



🗮 BIOPRO Baden-Württemberg 🛩



Genotype GmbH

Angelhofweg 39 D-69259 Wilhelmsfeld Phone: +49 (0) 6220/5 21 75 20 Telefax: +49 (0) 6220/5 21 75 25 service@genotype.de www.genotype.de

Contact person:

Dr. Michael Rieger

Production range/Services:

- Genome research
- Genomics
- DNA analytical services
- DNA sequencing services
- Nucleic acids purification products

Fields of action:

- Analytics
- Biotechnological Services
- DNA/RNA

Genotype GmbH is dedicated to molecular biology research and development of innovative products for biotechnology. Main areas of activity are genomics, high throughput DNA analysis and diagnostics, gene synthesis as well as dependable methods for the preparation of nucleic acids.

DNA analytical services for industry and academic customers started in 1984, establishing the first European company for DNA analyses.

Since 1991 Genotype has been participating in several international projects on genome research. These are mainly EU projects on genome analysis of various model organisms.

Genotype's DNA sequencing service includes template preparation, primer design, together with all subcloning steps including DNA library preparation. This applies for small projects such as rapid sequencing of PCR fragments up to precise analysis of large chromosomal regions or complete genomes. Since more than 30 years in operation, Glycotope Biotechnology GmbH is one of the most-experienced and fully GMP-compliant contract manufacturing organisations in Germany.

We can produce purified batches for preclinical studies and GMP batches for clinical phases and commercial batches. With four independent GMP-production suits, Glycotope Biotechnology GmbH offers the entire process of biopharmaceutical manufacturing from the clone to the drug ready to be administered in clinical trials.

The GMP-production has meanwhile been increased to a capacity of several kilograms of recombinant antibodies per fermenter unit per year. Besides fed-batch fermentation, we are capable of high efficient perfusion fermentation technology ranging from 10 to 1000 L, producing batch sizes up to 12,000 L. Furthermore, we offer fill and finish for up to 500 vials/batch and release of the drug substance.





In addition to manufacturing capacity, we are offering to our clients

- Protein analytical services
- Validation of methods according to ICH guidelines
- Cell banking
- A large variety of bioassays
- Immune-monitoring of patient samples
- Quantification of DNA and host cell protein in pharmaceutical products

Our immunodiagnostic department offers in vitro test systems, flow cytometry and cell based assays for drug screening and target validation.

Glycotope Biotechnology GmbH has increased from 35 to 75 employees within the last two years and plans to expand even further in the near future. Together with the parent company, Berlin-based Glycotope GmbH, Glycotope Biotechnology GmbH forms the Glycotope Group with currently 150 employees, representing one of the largest Biotech companies in Germany.



Glycotope Biotechnology GmbH

Czernyring 22 D-69115 Heidelberg Phone: +49 (0) 6221/91 05 0 Telefax: +49 (0) 6221/91 05 10 info@glycotope-bt.com www.glycotope-bt.com

Contact person:

Dr. Jens Pohl

Employees: 75

Production range/Services:

- Recombinant proteins
- Diagnostic kits
- **PHAGOTEST**®
 - BURSTTEST (PHAGOBURST®)
- BASOTEST®
- NK TEST®
- **THROMOCYTEST®**
- MIGRATEST®
- CE-Certified CMV-Kit
- Class One MHC-Tetramers

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- Custom Production
- Diagnostics
- Production Organisms
- Proteins/Peptides
- Therapeutics



Graffinity

Pharmaceuticals GmbH

- A Member of the NovAliX Group -Im Neuenheimer Feld 518
D-69120 Heidelberg
Phone: +49 (0) 6221/65 10 0
Telefax: +49 (0) 6221/65 10 11 1
contact@graffinity.com
www.graffinity.com

Contact person:

Dr. Thomas Neumann

Employees: 20

Production range/Services:

Graffinity offers:

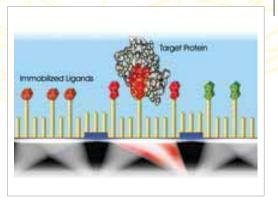
- Fragment based screening and drug discovery services by high throughput SPR screening of fragment libraries and rapid hit-to lead optimization using biophysical tools.
- The discovery and development of novel affinity ligands for bioseparation/purification of antibodies, including a universal (Fc) affinity ligand for the purification of antibodies (Protein A substitute)
- Drug Discovery
- Bioseparation

Fields of action:

- Analytics
- Contract Research
- Proteins/Peptides
- Therapeutics

Graffinity has built a unique approach to fragment based discovery exploiting label-free low affinity surface plasmon resonance (SPR) screening of one of the largest fragment libraries for the development of small molecule pharmaceuticals. The SPR array screening platform features a diverse collection of library compounds (>116k compounds including >25k fragments with MW < 300Da) immobilized on gold chips. Such high density chemical microarrays (9,216 sensor fields/array) can be rapidly screened against any kind of soluble protein target in a label-free manner using our in-house developed SPR imaging instruments. More than 100 targets from various protein classes have been screened successfully over the past 10 years for pharma and biotech customers. In addition to





more common classes such as kinases, proteases, metabolic enzymes etc., difficult target classes including protein-protein interaction (PPI) targets and inherently disordered proteins have also been addressed.

Graffinity benefits from being part of the NovAliX group, capable of providing complementary biophysical tools for hit optimization and has become a strong partner for early-stage integrated drug discovery.

The platform is also used for bioseparation purposes, namely, the development of novel affinity ligands such as a "universal Fc binder" for antibody purification.

Company Description

greenovation biotech GmbH is a biopharmaceutical company offering production of complex proteins for the pharmaceutical market as well as IVD and research market employing its proprietary BryoTechnologyTM.

A GMP production facility is currently furnished at Biomeva, Heidelberg, Germany and will be ready for production end of 2013 with one biopharmaceutical API produced for greenovation's Phase I/II clinical trial study in Fabry disease.

Products

Bryokine[™] FGF7

The first product ready to market is the recombinant human Keratinocyte Growth Factor (FGF7/ KGF) produced by the moss Physcomitrella patens. FGF7/KGF is a 19 kDa to 28 kDa monomeric glycoprotein. As a member of 23 known FGF growth factors, it plays a central role in cell proliferation, migration and differentiation, as well as homeostasis, response to injury, and tissue repair.

Services

For feasibility studies greenovation offers a transient production system allowing for quick access to feasibility amounts of high quality protein product as well as stable cell line development for a sustainable, cGMP-compliant production of APIs. greenovation offers production of pharmaceutical proteins in eukaryotic cell systems, utilizing plant



moss cells. Large scale production is in certified, disposable bag-based reactors of the wave-type. A GMP facility will be ready for production end of 2013 at Biomeva, Heidelberg, Germany.

Products will be fully physico-chemically and biologically characterized in a GMP certified analytic laboratory at PANATecs GmbH, Heilbronn, Germany

Clinical Developments and Licensing Opportunities

greenovation has 2 pre-clinical programs in the area of enzyme replacement therapies (Fabry and Gaucher) under way.

The first GMP manufactured product is the alpha-Galactosidase for replacement therapy of Fabry patients. The clinical trial phase I/II will start in spring 2014.

All clinical programs are open for licensing opportunities.

greenovation

greenovation Biotech GmbH

Inselwiesenstr. 10 D-74076 Heilbronn Phone: +49 (0) 761/4 70 99 0 Telefax: +49 (0) 761/4 70 99 19 1 info@greenovation.com www.greenovation.com

Contact person: Ms Manon Bartusel

Branches:

Hans-Bunte-Str. 19, 79108 Freiburg, Germany

Employees: 19

Production range/Services:

- Bryokine, e.g. FGF7 Feasibility studies
- Prodruction strain development
- Clinical development
- Licensing opportunities
- Biosimilars
- Biopharmaceuticals

- Custom Production
- Proteins/Peptides
- Therapeutics



BIOPRO Baden-Württemberg



Greiner Bio-One GmbH

Maybachstr. 2 D-72636 Frickenhausen Phone: +49 (0) 7022/9 48 0 Telefax: +49 (0) 7022/9 48 514 info@de.gbo.com www.gbo.com/bioscience

Branches:

Belgium, Brazil, China, France, Japan, Netherlands, UK, USA

Employees: 360

Production range/Services:

- DNA-arrays for diagnostics and analytics
- MICROLON[®], FLUOTRAC[™], LUMITRAC[™], UV-Star[®] and µClear[®] microplates and stripwells for specialized immunoassay investigations
- 96, 384 and 1536 well microplates for high-throughput screening and other multiwell applications
- CELLSTAR[®], Advanced TC[™] and CELLMASTER[™] cell culture products
- CELLCOAT[®] coated surface plastics
- CRYO.S[™] cryogenic storage tubes and datamatrix cryo rack
- Labware

Fields of action:

- Diagnostics
- Supplier

Pioneering Technologies for the Diagnostic and Pharmaceutical Industries

Specialists in the fields of biology, chemistry and physics work together for Greiner Bio-One BioScience to develop new products and solutions for the highly developed markets in Europe, Asia, and the USA. In the development of novel solutions for the future and the ongoing optimisation of existing solutions, special emphasis is given to micros and nanotechnologies, in order to assure through increasing miniaturization, right down to biochip technology, the utmost efficiency for biomedical and basic research. The sequencing of the human genome has enabled the early identification of diseases such as cancer, AIDS and diabetes, as well as more effective diagnosis of viral and bacterial infections, and the development of suitable medicines and therapies. In collaboration with Lambda GmbH, Greiner Bio-One BioScience is currently developing biochips



especially aimed at genotyping. The DNA-array PapilloCheck[®] for the simultaneous genotyping of 24 different types of human papilloma virus (HPV) is a successful example therefore. The biochip is an in-vitro diagnostica for the qualitative detection of human papilloma viruses in clinical specimens. With it, medical laboratories and clinics will benefit from a specific identification of the causative agent for cervical carcinoma.

www.gbo.com/bioscience





Modern diagnostic systems help cure

Hain Lifescience GmbH, founded in 1988, is the manufacturer and distributor of molecular diagnostic systems. The cornerstone of the company was laid in 1986 by the two brothers David and Tobias Hain. The focus of the company today is the independent development, production and distribution of modern diagnostic test systems and lab equipment. With these products definite statements can be made, for example about the presence of hereditary diseases. Other test systems are used to identify bacteria which cause diseases such as tuberculosis, MRSA or other serious infections.

Based on the continuous expansion of the company's facilities, Hain Lifescience currently has more than 90 employees in Nehren in the district of Tübingen. Additional expansion steps included the establishment of subsidiaries in Spain, South Africa, East Africa and Kenya, and UK.

The continuous company growth is in particular due to substantial capital investment in research





and development and the innovative products of high quality resulting from it. Close cooperation with leading universities and reference centers guarantee timely transfer of recent scientific knowledge into products for routine use. Since the company attaches great value on the inspected quality of their products, comprehensive quality control as well as the certified quality management according to ISO 9001/13485 and the fulfillment of the European in-vitro diagnostics guidelines are standard. This allows the company to always keep the product portfolio in line with the most current state of knowledge and developments, and thereby to constantly improve customer service.



Hain Lifescience GmbH

Hardwiesenstr. 1 D-72147 Nehren Phone: +49 (0) 7473/94 51 0 Telefax: +49 (0) 7473/94 51 31 info@hain-lifescience.de www.hain-lifescience.de

Contact person: Michael Wirth

Branches:

Spain, South Africa, East Africa and Kenya, UK

Employees: approx. 90

Production range/Services:

• Diagnostic test systems and lab equipment

- Diagnostics
- DNA/RNA
- Supplier



HB Technologies AG

Paul-Ehrlich Str. 5 D-72076 Tübingen Phone: +49 (0) 7071/97 61 1 Telefax: +49 (0) 7071/97 61 90 hbt@h-net.com www.h-net.com

Contact person: Dr. Steffen Hüttner

Branches: Cologne, Heidelberg, Reutlingen (GER), Chicago (USA)

Employees: 32

Production range/Services:

- Software for Workflow Management
- One-stop solutions for research laboratory instruments
- Production Systems for oligos and peptides
- Bio Assays
- Bioinformatic Services e.g. analysis for sequencing data
- Databases
- Validation for pharmaceutical and medical technologies
- Consulting

Fields of action:

- Bioinformatics
- Biotechnological Services
- Custom Production
- DNA/RNA
- Proteins/Peptides



HB Technologies AG is one of the largest software companies concerning Life Science and Engineering issues in the southern part of Germany. HB Technologies has expertise in consulting and developing technical software solutions since 1992 and a wealth of experience with over 450 projects in the mentioned areas. Due to active participation in a number of research projects supported by state and federal government, existing skills and services are continuously expanded.

The company is a software expert for automated production processes in industrial and research laboratories as well as laboratory instruments in general. In addition HB Technologies is a competent partner for questions in development, programming and testing software and electronic components in the automotive division.



Since 2008, the INTAVIS Bioanalytical Instruments AG in Cologne is a subsidiary. The product lines of INTAVIS AG include laboratory instruments with a focus on peptide synthesis and in situ hybridization. Furthermore INTAVIS offers Custom Peptide Services and sells Resins. These services complement the portfolio of HB Technologies AG and offer additional value for existing and potential customers.

HB Technologies portfolio covers the following modules

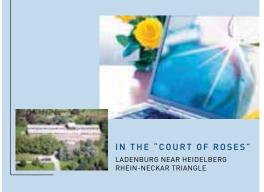
- Production Software, Process Optimization for industrial research facilities in Oligonucleotide, Peptide, Antibody, Bio-Assay and Genomic Analytics
- Workflow Management Software for industrial and research labs in cooperation with Robert Bosch GmbH
- Engineering and Manufacturing for instruments and devices
- Bioinformatic Services mainly for sequencing data (from standard evaluations up to complex pipelines)
- Lab Research Instruments for applications in PCR, Online-PCR, Liquid-handling, Bio- and Medical tests



Heidelberg Pharma is a pharmaceutical company with a dual business model: Preclinical services in pharmacology and bioanalytics as well as development of drugs to treat cancer. For investigating compounds in an exploratory way, our flexibility allows customized experimental designs and the development and validation of new models besides a range of routinely used test systems. For in vitro profiling, we have over 100 tumor cell lines available in-house. Multiple human tumor xenograft models are in routine use at Heidelberg Pharma. Efficacy can be determined in tumors differing in growth rate, response to clinical standards or expression of selected target proteins. Moreover, we have established a range of mechanistic and disease models for the characterization of antiinflammatory drug candidates. Our bioanalytical service program includes plasma and tissue pharmacokinetics, tissue distribution- and mass balance studies using radiolabeled compounds. State-of-the art lab equipment and SOP controlled processing ensure high quality and reproducible data, which are reported according to regulatory standards. Besides being a preclinical

Heidelberg

PRE-CLINICAL SERVICES DRUG PROFILING & BIOANALYTICS CANCER AND INFLAMMATORY DISEASE



service provider, the company has developed an entirely new technology for the design and development of antibody-drug-conjugates. The technology is based on access to a specific toxin that is coupled to antibodies. The approach offers new perspectives for treating cancer patients that have become resistant to conventional treatment and with tumor metastasis.



Heidelberg Pharma GmbH

Schriesheimer Str. 101 D-68526 Ladenburg Phone: +49 (0) 6203/10 09 45 Telefax: +49 (0) 6203/10 09 76 4 info@hdpharma.com www.heidelberg-pharma.com

Contact person:

Prof. Dr. Andreas Pahl

Employees: 39

Production range/Services:

- Pre-clinical services
- Antibody drug conjugates (ADC)

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- Proteins/Peptides
- Therapeutics



HPLC with autosampler and -MS/MS Masspectrograph (Agilent/Applied Biosystems)



HiSS Diagnostics GmbH

Güterhallenstr. 3 D-79106 Freiburg Phone: +49 (0) 761/38 94 90 Telefax: +49 (0) 761/38 94 920 hiss@hiss-dx.de www.hiss-dx.de

Contact person:

Georg Klopfer, Dr. Christina Schäfer

Employees: 12

Production range/Services:

Diagnostics:

- molecular testing for leukemia
 & lymphoma
- in vitro diagnostics
- Life Science:
- NGS library prep kits for all major platforms
- monoclonal & polyclonal antibodies
- ELISA kits for human, mouse & rat
- transfection reagents
- cell isolation in 10 min.
- non-toxic immunization adjuvant
- Services:
- Custom antibody production

Fields of action:

- Analytics
- Cells/Cell Lines
- Custom Production
- Diagnostics
- DNA/RNA
- Proteins/Peptides
- Supplier



HiSS Diagnostics GmbH is offering a wide range of products in diagnostics as well as in life science. HiSS Diagnostics was founded in 1989, is privately held and located in Freiburg, Germany. We are qualified for DIN EN ISO 13485:2003, under CAMCAS.

Main focus in *diagnostics* are products for molecular testing for leukemia and lymphoma. Additionally we offer PCR and ELISA tests for microbiology and virology. Our portfolio is completed by quality control material for blood banks, transfusion centers and virology labs.

- For life sciences HiSS Diagnostics offers:
- Next Generation Sequencing Library Preparation Kits (gDNA, Amplicons, mRNA, small RNA) compatible with Illumina HiSeq and MiSeq as well as Ion Torrent PGM and SOLiD
- Antibodies for Alzheimer's and neurodegenerative diseases, cell biology, immunopathology and against epitope tags
- ELISA kits for human, mouse and rat cytokine detection as well as recombinant cytokines, chemokines and growth factors

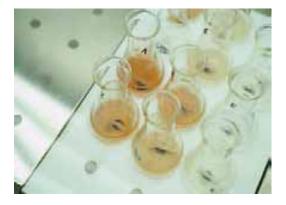
- Enzymes and master mixes for PCR, RT-PCR, qPCR and other reagents for molecular biology, western blot detection and protein biochemistry
- Transfection reagents for DNA, siRNA and peptides for in vitro and in vivo applications
- Antibody and filtration based kits for gentle, fast and simple cell separation from whole blood, buffy coat or cell suspensions without magnetic beads or centrifugation
- Non-toxic immunization adjuvant as alternative to Freund's complete adjuvant

Hydrotox GmbH

Hydrotox GmbH, founded in 1989, is a GLP-certified contract laboratory for carrying out studies involving biodegradability, ecotoxicity and genotoxicity of substances, complex mixtures and environmental samples. Beside routine studies for chemical registration, e.g. in compliance with EU and OECD standard guidelines and directives as well as EN and national standards, Hydrotox also performs research projects for industry and public institutions and is board of expertice for environmental labels.

The main focus of research activities is on the assessment of chemical substances, products and wastewater as well as on the integration of laboratory tests in product development, the optimization of processes and material







flow management. Our clients are chemical industry, pharmaceutical companies, textile industry, construction material manufacturers and others.

Coordinating closely with our clients and the regulatory authorities and agencies, Hydrotox works out the right solution for the task in hand. Systematic investigation strategies based on comprehensive research, the scientific and economic assessment of all parameters and extensive documentation lead to ecologically and economically convincing results.



Hydrotox GmbH

Bötzinger Str. 29 D-79111 Freiburg Phone: +49 (0) 761/4 55 12 0 Telefax: +49 (0) 761/4 55 12 34 info@hydrotox.de www.hydrotox.de

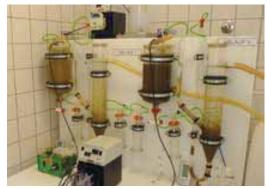
Contact person: Dr. Stefan Gartiser

Employees: 10

Production range/Services:

Environmental risk assessment GLP-studies concerning ecotoxicology, biodegradability and mutagenicity

- Analytics
- Contract Research
- Environmental Biotech





BIOPRO Baden-Württemberg



IBAM GbR Dr. Rainer Knörle & Dr. Peter Schnierle

Ferdinand-Porsche-Str. 5 D-79211 Denzlingen Phone: +49 (0) 7666/88 45 75 8 Telefax: +49 (0) 7666/88 45 76 0 info@ibam.de www.ibam.de

Contact person:

Dr. Rainer Knörle

Production range/Services:

- Drug mode of action
- Drug discovery and development
- Receptor binding assays
- Functional assays
- Hormone and neurotransmitter uptake and release
- Enzyme inhibition assays
- Melanin affinity of drugs
- CNS active plant extracts

Fields of action:

- Analytics
- Biotechnological Services
- Contract Research
- Therapeutics

Founded in 1996 as a spin-off of the Neuropharmacology section at the University Freiburg, IBAM is a privately owned laboratory for contract research in (phyto-)pharmacology. Our expertise includes customised binding assays, cellular and tissue assays for various enzymes, transporters, receptors and ion channels.

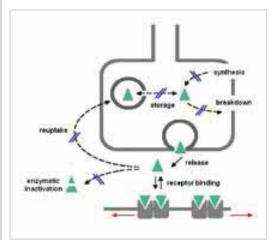
Pharmacological investigation of drugs

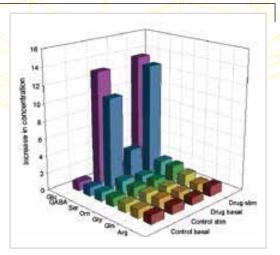
We offer the characterisation of the pharmacological profiles of chemical substances and plant extracts. Based on this knowledge, drug effects may be explained and new drugs and indications may be found.

IBAM provides several models to study druginduced modulation of hormone and neurotransmitter release and uptake. We perform experiments into binding of substances (drugs, plant extracts, etc.) to specific binding sites at receptors, other proteins and biopolymers like melanin.

Screening for pharmacologically active plant extracts

Medicinal plants are used in folk medicine for centuries. The rejection of synthetic or biomedical products has become a growing trend in





Western society since the turn of the century and allowed for a rise in the demand for natural medicines. Most medicinal plants are used traditionally without the knowledge of their pharmacological action.

We test plant extracts for their potential physiological or pharmacological activity by studying their effects on hormone or neurotransmitter turnover, receptor binding or enzyme activities. Several plant extracts with pharmacologically confirmed medicinal benefit were identified.



<mark>ibt</mark> – Immunological and Biochemical Testsystems GmbH

ibt develops, manufactures and distributes immunological reagents: recombinant proteins and antibodies (e.g. infectious diseases, transcription research, hormones, enzymes, growth factors and cytokines). A new focus is on development, manufacturing and distribution of immunoassay kits for Insulin-like Growth Factors (IGF's) and Insulin-like Growth Factor Binding Proteins (IGFBP's) and related molecules. Biotinylated IGF's and IGFBP's are available as well as a custom biotinylation service. Applications of biotinylated IGFs (and other peptides) are in western-ligand blottting, ELISA, protease assays, IHC, immunoprecipitation, cross-linking, cell sorting, immunohistochemistry and experimental cell therapy. A new research focus is on tissue engineering.



ibt participates in the BIOSCENT project within the European Community's Seventh Framework Programme. In this project ELISA kits have been developed for the detection of SDF-1 alpha in human, rat and mouse samples.



ibt – Immunological and Biochemical Testsystems GmbH Wiesenstr. 17 D-88521 Binzwangen Phone: +49 (0) 7371/95 22 00 0 Telefax: +49 (0) 7371/95 22 00 7 info@ibtsystems.de www.ibtsystems.de

Contact person:

Dr. Lothar Seik

Production range/Services:

- Recombinant proteins
- Monoclonal and polyclonal antibodies
- Immunoassay kits
- Ligand blotting kits

- Analytics
- Custom Production
- Diagnostics
- Supplier
- Proteins/Peptides
- Tissue Engineering





ımmatıcs

immatics biotechnologies GmbH Paul-Ehrlich-Str. 15 D-72076 Tübingen Phone: +49 (0) 7071/53 97 0 Telefax: +49 (0) 7071/53 97 90 0 info@immatics.com www.immatics.com

Contact person: Paul G. Higham, CEO

Branches:

Munich, Germany

Employees: 70 FTE

Production range/Services:

immatics is currently developing three multi-TUMAP products in clinical studies - IMA901 for the treatment of renal cell carcinoma (RCC) in a clinical Phase III study (patient recruitment completed), IMA910 for the treatment of colorectal carcinoma (CRC) in Phase II and IMA950 in collaboration with partners for the treatment of brain cancer (glioblastoma) in Phase I. Further product candidates like IMA941 for the treatment of gastric cancer and a project for treatment of non-small cell lung cancer patients are currently in pre-clinical development.

Fields of action:

- Proteins/Peptides
- Therapeutics



immatics biotechnologies is a clinical-stage biopharmaceutical company developing advanced therapeutic vaccines that are active against cancer. immatics' lead product IMA901 is in a Phase III clinical trial in renal cell carcinoma and has completed its patient recruitment in Nov. 2012. immatics' pipeline also includes IMA910, in Phase II for colorectal cancer, and IMA950 which is being developed for glioma.

immatics' technology platform rapidly generates defined therapeutic cancer vaccines which are based on multiple tumor-associated peptides



(TUMAPs) with the ability to specifically stimulate the immune system against cancer cells. These vaccines – comprising multiple peptides confirmed to be naturally presented by real tumor tissue – offer the prospect of greater effectiveness than existing cancer vaccine approaches combined with fewer side effects. immatics' products are 'drug like' with stable, off-the-shelf formulations and robust easily scalable manufacturing.

immatics is based in Tuebingen and Munich, Germany, and has raised more than €100 million (US\$130 million) in private equity in three financing rounds.





Insilico Biotechnology AG

Insilico Biotechnology is a market-leading company providing solutions and software for the simulation of living cells. An interdisciplinary team of experts offers customised solutions for the efficient manufacturing of biotechnological products and for the development of drug test systems by using high-performance computing and Insilico's proprietary software. For world-leading companies from the chemical and pharmaceutical industries, Insilico's technology lowers time, risk and costs of development processes. Founded in 2001, Insilico is a privately held company based in Stuttgart, Germany.





Insilico Biotechnology AG

Meitnerstr. 8 D-70563 Stuttgart Phone: +49 (0) 711/46 05 94 0 Telefax: +49 (0) 711/46 05 94 10 info@insilico-biotechnology.com www.insilico-biotechnology.com

Contact person:

Klaus Mauch, Vorstand

Employees: 20

Production range/Services:

Insilico Professional Services

- Identification of synthetic pathways for new bioproducts
- Identification of multiple gene-targets for improved product yields
- Optimization of media/feeding
- Prediction of long-term toxicity Insilico Databases and Software
- Repository of prokaryotic and eucaryotic insilico strains
- Organ models
- Enterprise software for systemsoriented process analysis
- Software Development
- Drug Testing

- Bioinformatics
- Contract Research
- Therapeutics
- White Biotechnology

See BIOPRO Baden-Württemberg 🛩



Jobst Technologies GmbH Engesserstr. 4b D-79108 Freiburg Phone: +49 (0) 761/55 77 52 0 Telefax: +49 (0) 761/55 77 52 2 info@jobst-technologies.com www.jobst-technologies.com

Contact person:

Gerhard Jobst

Employees: 5

Production range/Services:

Biosensors for glucose, L-lactate, L-glutamine, and L-glutamate, L-pyruvate; sensors for oxygen, H_2O_2 ; cell adhesion. Any combinations of the sensors – flow through or dip in format – and internal volumes as low as 80 nl are possible. Application: cell culture or clinical multiparameter monitoring.

Fields of action:

- Analytics
- Custom Production
- Diagnostics
- Environmental Biotech

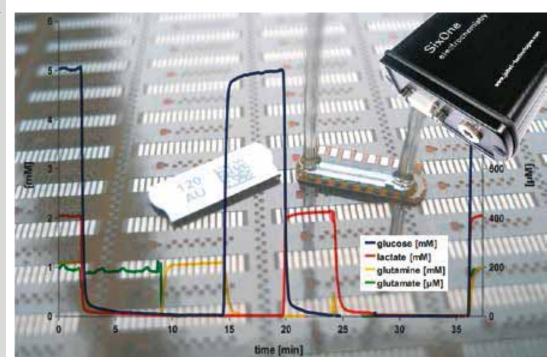
Jobst Technologies is a young technology orientated enterprise offering its core competencies in the overlap between micro systems technology and (bio)electrochemical analytics both as service and products to his customers.

Our expanding product portfolio encompasses sensors for cell adhesion, methanol, hydrogen peroxide, ethanol and oxygen, biosensors for glucose, pyruvate, glutamate, glutamine and lactate. We also offer microfluidic systems such as static micromixers, complete monitoring solutions comprising of sensor arrays, microfluidics, electronics, and software, and robotic dispensing systems for smallest volumes. The products are intended for clinical applications in the intensive clinical care unit and for point of care application, for cell culture monitoring in biotechnology and for environmental monitoring. Low flow rate multiparameter monitoring at nl-volumes is one outstanding specialty the company offers. Additional activities are contract research and development for medical device manufacturers as well as product development for life science applications.

"Rational technology integration aiming at biomicro convergence" is a slogan created by Gerhard Jobst, founder and CEO of Jobst Technologies.

The company is partner in national and international research projects in the fields of multiparameter monitoring for applications like drug screening or in cancer research at low oxygen tension conditions. An additional European project focuses on integrated optics.

The flexibility of our technology portfolio not only ensures development and production at competitive costs but also allows realisation of cost effective customised solutions for clinical diagnostics and biotechnological applications.



Junker Filter GmbH

Since the mid-50s Junker-Filter GmbH is succesful within the branch filtering mediums for dust filtration and solid/liquid separation.

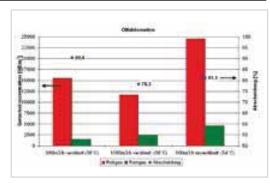
We number well-known companies among our longterm and continuous growing customer base from the following industries.

- Chemical industry, pharmaceutical industry, food processing industry and beverages
- Power generation and dust separation
- Steel + Metal + Metallurgy
- Automotive industry
- Municipal and industrial waste water treatment
- Recycling

Intensive research and development characterizes our work. Whereby the existent product range is continuously adjusted by developing procedures and new products to supplement the actual product portfolio. Of particular importance are:

• tailor-made filter concepts for state-of-the-art dust filtration – our contribution to the maintenance of a clean environment





- implementation of practical concepts and new technologies in solid-/liquid separation as well as in residue treatment
- new development of the patent-registered system "BEGA" = Biological-Electrical Gas Cleaner, which sets a new procedural standard for reducing odors and for the degradation performance of VOC (volatile organic compounds)

Junker Filter offers a wide range of service and maintenance works around filter technology. We are the best contact, no matter whether you are planning new filter concepts or improving existing filter systems. Furthermore flexibility, know-how, continous innovation and umcompromising quality completes our profile.



Junker Filter GmbH

Carl-Benz-Str. 11 D-74889 Sinsheim Phone: +49 (0) 7261/92 83 0 Telefax: +49 (0) 7261/92 83 99 info@junkerfilter.de www.junkerfilter.de

Contact person:

Jürgen Junker

Employees: approx. 100

Production range/Services:

- BEGA = Bioelectrical Gas Cleaner
- Simultaneaous separation of dust and odor by combining an electrical separator and a biofilter

Fields of action:

• Environmental Biotech



LABOR DR. MERK & KOLLEGEN

Beim Braunland 1 D-88416 Ochsenhausen Phone: +49 (0) 7352/91 19 30 Telefax: +49 (0) 7352/91 19 40 info@labormerk.de

Contact person:

Dr. Ingrid Rapp

Employees: 45

Production range/Services:

- Biosafety testing (GMP and GLP)
- Validation of manufacturing process steps for virus elimination or inactivation
- Extraneous agent testing; Testing of disinfectants for antiviral and antimicrobial efficacy
- Microbial cleaning or steam sterilization validation studies
- In vitro toxicity testing
- Development and production of In vitro diagnostics

Fields of action:

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- Diagnostics
- Production Organisms
- Proteins/Peptides



Labor Dr. Merk & Kollegen GmbH (LMK) was founded in 1971 and holds excellent expertise in biosafety testing for virology, microbiology and toxicity of intermediates or final products from pharmaceutical industries or medical device manufacturers. A wide range of GMP and GLP compliant methods for preclinical studies or quality control of final product testing is available. Stability testing of veterinary vaccines is an additional service for pharmaceutical industries. Since 2008, LMK is authorized by the Regierungspräsidium Tübingen to perform GMP compliant services for viral, mycoplasma and microbial contamination testing.

Validation of manufacturing process steps for virus elimination or inactivation, testing of substances for antiviral activity or extraneous agent testing of materials of animal or cell culture origin are available with a broad range of human or animal pathogenic virus/cell systems. Since 2005, as member of the expert committee "virus disinfection" of the DVV (German



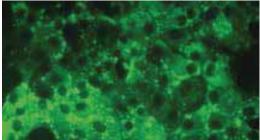


Association for the Control of Virus Diseases), LMK offers antiviral efficacy testing of disinfectants for human and veterinary use.

In addition to standard microbiological methods, cleaning and steam validation studies of medical devices are offered.

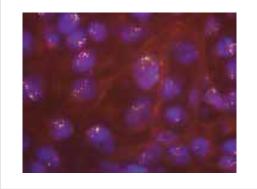
The company has been operating since the beginning in the in vitro diagnostic fields like virology and microbiology of infectious disease serology. LMK is certified according to DIN EN 13485 and DIN EN ISO 9001:2008 for the production of in vitro diagnostic devices and research reagents. LMKs laboratories develop, design and manufacture test kits and reagents, also on customer request.

LMK cooperates with companies, universities and research institutions to generate expert experience and exchange of know-how. With our well experienced team we are prepared to meet the customers' needs with appropriate and innovative solutions.

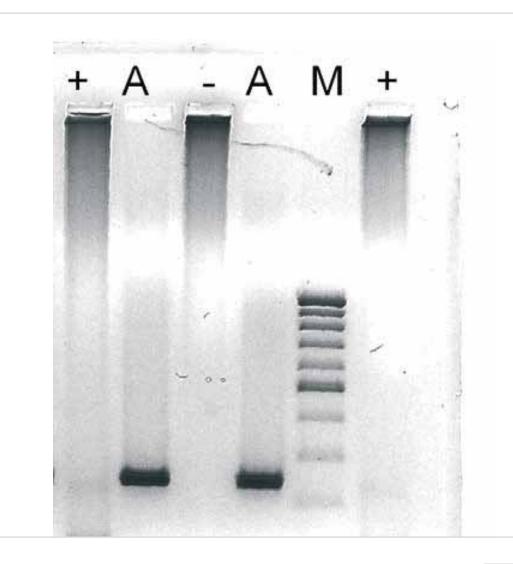


Labor für DNA-Analytik

Labor für DNA-Analytik was founded in 1993. It supports scientists involved in molecular biology and medicine in their research. It offers more than 25 years of experience in DNA- analysis and research in molecular biology. Main activities are focused on: PCR based pathogen detection in human samples, cloning, development of new PCRs according to the customer's need, DNA sequencing including primer design and mutation analysis, cDNA synthesis, cloning, fluorescent in situ hybridi-



sation (FISH), STR-based analysis of human samples, paternity testing, species identification by DNA barcoding.





Labor für DNA-Analytik

Klarastr. 66 D-79106 Freiburg Phone: +49 (0) 761/40 79 56 Telefax: +49 (0) 761/40 79 56 alt-moerbe@dna-analytik.de

Contact person: Dr. Juliane Alt-Mörbe

Employees: 2

Production range/Services:

Services in molecular biology: PCR, PCR-based identification of pathogens, DNA sequencing and cloning, FISH, STR profiling, paternity tests, identification of cell lines

- Analytics
- Biotechnological Services
- Diagnostics
- DNA/RNA

LOGOPHARM

Logopharm GmbH

Schlossstr. 14 D-79232 March-Buchheim Phone: +49 (0) 761/2 03 51 27 Telefax: +49 (0) 761/2 03 51 91 info@logopharm.com www.logopharm.com

Contact person:

Dr. Uwe Schulte

Branches: 1 in Freiburg (GER)

Employees: 5

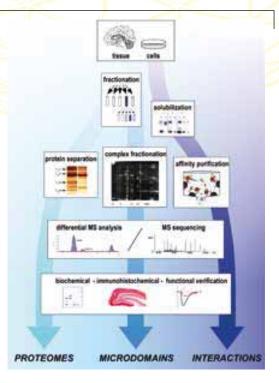
Production range/Services:

- Proteomic services (membrane protein purification and characterization)
- Mass spectrometry (label-free quantification, PTM-analysis)
- Technology development
- ComplexioLyte detergent buffers
- Validated antibodies

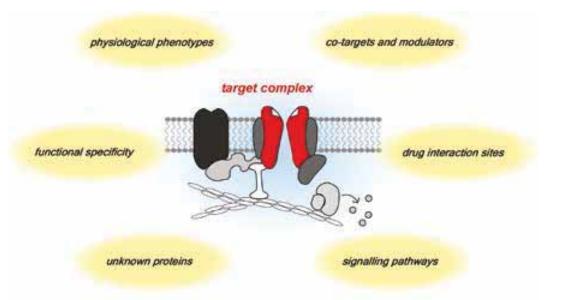
Fields of action:

- Analytics
- Bioinformatics
- Biotechnological Services
- Contract Research
- Supplier
- Proteins/Peptides

LOGOPHARM GmbH is a biotech company that provides specialized services in proteomic target and biomarker R&D with independent discovery projects for CNS indications. The company located in Freiburg (Germany) was founded by a team of scientists and business experts. It combines proprietary proteomic technologies, long-term experience in functional membrane protein analysis and innovative drug development concepts with a focus on membrane proteins and protein complexes. Our proprietary developments include the CompleXio technology for the identification of protein-protein interactions in native tissue, microproteomic analysis with ultimate sensitivity and label-free quantitative mass spectrometry. The used strategies are broadly applicable to targets and biomarkers, require very small amounts of sample and show a lower error rate than current high-throughput approaches. Based on this we offer advanced proteomic services, research consulting and



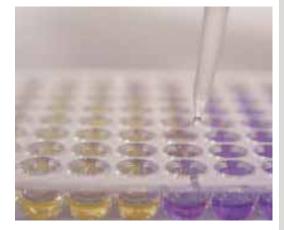
implementation of technology, individually adapted to our customers' needs. In addition, we have established research collaborations with distinguished academic and commercial partners to promote our technology and independent development projects.



Mediagnost

Mediagnost Company (GmbH) is a leading company located in the Technologie-Park Tübingen-Reutlingen that develops, manufactures and markets innovative biomedical diagnostics and raw products like monoclonal antibodies and antigens for pharmaceutical companies.

Mediagnost operates through direct offices in Germany and in the United States (Mediagnost of America, Phoenix, Arizona) and through a network of distributors worldwide. Mediagnost was formed in 1985, its primary purpose was to commercialize antigen and antibodies to pharmaceutical companies. Since 1985 Mediagnost has largely extended and its main focus lies on designing innovative diagnostic tools (Endocrinology, Diagnostic of infections, Nucleic Acid Technology, Nanotechnology) in a swift transfer from the scientific research base directly to the customer.







Mediagnost GmbH

Aspenhaustr. 25 D-72770 Reutlingen Phone: +49 (0) 7121/5 14 84 0 Telefax: +49 (0) 7121/5 14 84 10 contact@mediagnost.de www.mediagnost.de

Contact person: Dr. Lutz Pridzun

JI. LUIZ FIIdZUI

Branches:

Mediagnost of America, Phoenix, USA

Production range/Services:

Diagnostics in endocrinology and infectious diseases: ELISA, RIA, Multiplex, PCR, ligand binding assays, reagents and raw material, cell culture service, diagnostic service

- Diagnostics
- Biotechnological Services
- Custom Production
- Contract Research
- Cells/Cell Lines
- Production Organisms

HEDICHEM[®] DIAGNOSTICA-VERFAHRENSENTWICKLUNG

MEDICHEM Diagnostica

GmbH & Co. KG Kringstr. 3-5 D-71144 Steinenbronn Phone: +49 (0) 7157/53 04 0 Telefax: +49 (0) 7157/53 04 11 info@medichem.de www.medichem.de

Contact person:

Mr. Insa Lô

Employees: 14

Production range/Services: In-vitro diagnostic Reference material for internal accuracy and precision testing (whole blood, serum, urine, hair)

Fields of action:

- Analytics
- Custom Production
- Diagnostics
- Supplier

MEDICHEM has access to an experience of more than 20 years in development and production of in-vitro diagnostic products. The office is located in Steinenbronn, close to the Stuttgart Airport. The quality management system of MEDICHEM Diagnostica GmbH & Co. KG is certified according to EN ISO 9001 and EN ISO 13485.

The foundation of MEDICHEM Diagnostica has been made by Atou Khalide Lô in 1986. At that time it was a sole proprietorship. In 1998 his son Insa Lô joined the company as a partner, he finally became managing director in 2004. Now, MEDICHEM Diagnostica employs 14 permanent workers and additionally several freelancers in research and development affairs.





MEDICHEM provides reference material for internal accuracy and precision testing. Precision testing focuses mainly on the longitudinal expansion of the single control test within the quality control batch, i.e. a specific concentration range next to legal or generally applicable boundary values.

Accuracy testing materials are additionally used to review the compliance level of the individual measurement result with the real value of the indicator. The compliance level has to be evaluated trustworthy by a minimum of representative testings with validated, mostly internal standardized and evident methods, especially proficiency tests.

For internal accuracy testing MEDICHEM provides both accuracy test samples as well as selected proficiency test samples, taken from proficiency tests for well-known professional medical associations i.e. DGKL (German Society for Clinical Chemistry and Laboratory Medicine) or GTFCh (Society of Toxicological and Forensic Chemistry). This happens after the evaluation of the respective proficiency test and the successive result approval of the proficiency test authority. Those proficiency tests can therefore be used as reference test samples, currently the reference material most suitable and characterized best for forensic-toxicological analyses.

≡medicyte

New in vitro Assays:

Medicyte is a life science company specialized in the controlled generation of high quality human primary cells in virtually unlimited quantities. Medicyte's proprietary technologies, upcyte[®] and vericyte[®], for the first time enable the production of commercially available standardized human cells from different donors. There is a growing list of companies using upcyte[®] cell strains and vericyte[®] cells as an alternative to current in vitro models for cell-based R&D.

upcyte® cell strains – the better alternative:

Medicyte is establishing its proprietary products as gold standards and the preferred source of human cell-based products for research, industrial and therapeutic applications. Key applications for Medicyte's products are:

- 1. Cell assays for drug discovery & development and basic research:
- Replacement of cell lines and existing primary cell models with standardized upcyte[®] cells.
- Novel high end primary cell models for pharmaceutical industry, e.g. in vitro ADME-Tox.
- Customized production of upcyte[®] cells.



- 2. Therapeutic applications in regenerative medicine:
- Development of novel primary cell therapies for liver and bone regeneration.

3. Non-pharmaceutical applications:

• Models for toxicity screening in the chemical and cosmetics industry (REACH).

Further information can be found at www.medicyte.com



Medicyte GmbH

Im Neuenheimer Feld 581 D-69120 Heidelberg Phone: +49 (0) 6221/7 29 25 30 Telefax: +49 (0) 6221/7 29 25 31 assistant@medicyte.com www.medicyte.com

Contact person:

Stefan Holder Managing Director

Employees: 18

Production range/Services:

- Novel cell assays e.g. for ADME-Tox
- upcyte[®] and vericyte[®] cells in superior quality and virtually unlimited quantity
- Cell therapeutic co-development
- Primary cell media and cell culture products

- Cells/Cell Lines
- Custom Production
- Supplier
- Tissue Engineering

menal



menal GmbH

Gesellschaft für medizinisch naturwissenschaftliche Laboranalyik

Im Hausgrün 15 D-79312 Emmendingen Phone: +49 (0) 7641/93 33 46 Telefax: +49 (0) 7641/93 33 489 info@menal.de www.menal.de

Contact person:

Tobias Engelmann, Dr. Peter Engelmann

Employees: 12

Production range/Services:

- Collagen-R in different concentrations for cell culture use
- Analytics for clinical studies according to GCP/GLP
- Analytics for pre-clinical studies (Toxicology)
- Analytics for pharmacodynamics and pharmacokinetics
- Quantitative analysis of active pharmaceutical ingredients/ metabolites in biological matrices
- Method development
- Method validation
- Reporting

Fields of action:

- Analytics
- Biotechnological Services
- Supplier
- Proteins/Peptides

menal GmbH is a GLP/GCP conform analytical lab, based in Emmendingen near Freiburg.

Over a period of more than 20 years, menal has built up and established a strong partnership with the pharmaceutical industry, specialising in bioanalytical research into pharmacokinetics and pharmacodynamics.

Individuality and flexibility distinguish our laboratory from others. Personal contact and fast processing are our priority, which enable our customers worldwide to easily keep up with advancing developments. Highest quality analyses "performed in Germany" include analytics for clinical studies according to GCP/GLP, analytics for pre-clinical studies (Toxicology), analytics for pharmacodynamics and pharmacokinetics and quantitative analysis of active pharmaceutical ingredients/metabolites in biological matrices. LC/MS/MS methods and different bioassays can be performed.

As a manufacturer of sterile Collagen-R in different concentrations for cell culture, menal are distributing their products worldwide.





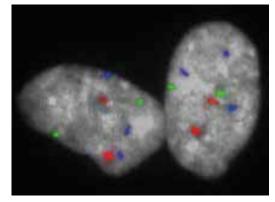




MetaSystems is an employee-owned German company specializing in automated scanning and image analysis for cytogenetics, cancer genetics, toxicology, pathology, forensic sciences and other applications. MetaSystems is based on more than 26 years of experience in image analysis and automated microscopy. This background ensures MetaSystems being at the forefront of technology. Today, more than 1,600 laboratories in over 80 countries rely on the quality and stability of MetaSystems products.

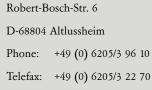
MetaSystems is the manufacturer of the renowned slide scanning platform Metafer, an innovative system for unattended automated microscopy imaging. The system scans up to 800 slides fully automatically, reads bar codes, and provides extensive tools for automated image enhancement and analysis. Metafer is the perfect system to automate clinical cytogenetic imaging (in combination with the karyotyping system Ikaros and the FISH imaging system Isis), to reliably evaluate toxicology and radiation biodosimetry tests, and to generate high quality digital slides, e.g. from tissue sections in pathology labs.

Any data obtained with MetaSystems devices are organized with the help of the integrated patient and case management software. Fast retrieval of



cases, importing and exporting case and image data to other data management systems, and the generation of informative reports and statistics queries is easily possible. Hereby data integrity is guaranteed by MetaArchive, the professional archiving software. The outstanding flexibility of MetaSystems devices allow the configuration of highly professional multi-user workplaces.

MetaSystems is proud to offer complete solutions for clinical image analyses, including a wide range of high quality DNA probe kits (XCyting Probes). The probe kits portfolio includes chromosome paints and multicolor FISH probes for human, mice, and rat chromosomes, multicolor chromosome banding probes (mBAND), and a continuously growing number of locus-specific probe kits to identify clinical syndromes in hematology, pathology, and other domains.



MetaSystems GmbH

info@metasystems.de www.metasystems.de

Contact person:

Dr. Andreas Plesch

Branches:

Altlussheim (50 employees) Boston (12 employees) Hong Kong (12 employees) Bangalore (2 employees)

Employees: 50

Production range/Services:

- Automated slide scanning platform Metafer for cytogenetics, toxicology, and pathology
- Karyotyping system Ikaros with integrated case data management
- Fluorescence imaging system Isis with modules for mFISH, mBAND, and CGH
- DNA probe kits for multi-fluorochrome analyses and haematology diagnostics

- Analytics
- Bioinformatics
- Diagnostics
- DNA/RNA
- Supplier



😽 BIOPRO Baden-Württemberg 🛩



micro-biolytics GmbH

Schelztorstr. 54-56 D-73728 Esslingen Phone: +49 (0) 711/90 12 11 0 Telefax: +49 (0) 711/90 12 11 90 0 info@micro-biolytics.com www.micro-biolytics.com

Contact person:

Andreas Wolf

Employees: 9

Production range/Services:

- Pharmaceutics
- drug screening, formulation and stability studies
- Proteomics identify and characterize proteins
- Process Analytical Technology and manufacturing QC – optimize processes
- Diagnostics determine diseases by specific patterns
- Service measurements
- Feasibility studies

Fields of action:

- Agriculture/Food
- Analytics
- Biotechnological Services
- Supplier

With the AquaSpecTM Technology, micro-biolytics offers a new class of analytical technology within liquid solutions. This innovating technology is based on middle infrared spectroscopy which is recognized as the most sensitive optical absorption technique for detecting all molecular details in lowly concentrated organic compounds (e.g. compared to NIR or UV/VIS). The AquaSpecTM Technology platform provides fast and powerful tools to detect the state as well as changes of an observed solution. By means of the fully automated MIRA – Analyzer Series the AquaSpecTM Technology offers a wide range of applications in pharmaceutical, clinical and other analytical fields.

Applications: Pharmaceutics - stability studies

By AquaSpec[™] Technology, aqueous as well as organic solutions can be investigated in the range of minutes without sample pre-treatment, yielding detailed information about the current state of the measured sample. Thus, in many applications AquaSpec[™] Technology is an additional option or alternative to HPLC and GC.

Process Analytical Technology and manufacturing QC – optimize processes

In Process Analytical Technology, the main challenge is to find out properties and compositions of relevant substances with highest quality demands. microbiolytics develops individual AquaSpec[™] Process Analytical Technology solutions and provides overall customer support. AquaSpec[™] MIRA Analyzers can be implemented for both laboratory and process environment (atline/online) and are in line with the FDA Process Analytical Technology initiative. One of the main aims in fermentation/cell culture is to improve the space-time yield and reduce time for process development. But therefore detailed



process knowledge is essential. The AquaSpec[™] Technology can give a detailed insight in the composition of the culture broth. Enabling the simultaneous detection of many relevant substances such as substrates, products or side products even in low concentrations within a two minutes measurement.

Diagnostics – determine diseases by specific patterns

Some diseases generate specific changes in the metabolic pattern of blood or other body fluids and can be identified and classified by their characteristic spectroscopic markers using AquaSpecTM Technology. Our partner Cetics Healthcare Technologies ensures a drastic simplification of analyses in toxicology, cell culture quality control, pharmaceutical development. Cost-effective high-precision infrared spectra can be obtained from biological samples such as blood serum, liquor, and cell culture supernatants with the patented AquaSpecTM MIR spectroscopy method. Complex information about the individual composition of every sample becomes available in digital form.

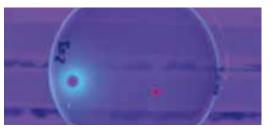
Food & quality analysis with $\mathbf{Q} \bullet \mathbf{Food}$

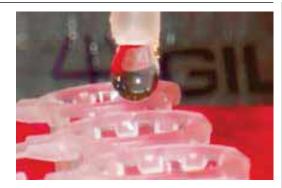
The Q • FOOD analysis system, a compact very precise system for liquids such as beer and soft drinks. The analysis method gives you the possibility to measure the most important ingredients at once, e.g. bitterness, alcohol, sugar, or the pH value. The result is already available a few minutes after the measurement, without involving an external laboratory. Secure the quality of the products themselves - right on the production line.

MicroMol The fine art of life science

The Biotech Company MicroMol was founded in 1997 by the microbiologists Dr. Andrea and Dr. Andreas Dreusch and is still a private and independent enterprise with an innovative concept combining highly qualified technical expertise with competence in Food Quality Management. MicroMol engages at the moment 30 skilled scientific employees working in different fields of activity divided into research, consulting and service/contract research. MicroMol's strength lies in the power to flexibly implement and manage customer directed R&D tasks in the fields of Microbiology, Molecular Biology/Biochemistry and Tissue Culture/Immunology. For this purpose MicroMol offers a perfectly equipped Research Laboratory with about 400 square meters lab space located in the south of Karlsruhe.

To provide deeper insight into its project portfolio MicroMol finds itself as one of the rare specialists for the detection an determination of bacteriophages in cell banks an expression cultures. In the field of sophisticated functional testing models MicroMol has set up a platform for the alternative evaluation of chemicals, substances and cosmetics according to their cytotoxicity as well as to their corrosive and irritative potential to the skin (DIN/ ISO 10993-5; OECD 431). The field of complex testing is complemented by the generation of a panel of proprietary chicken enterocyte cell lines serving for the establishment of in vitro pathogen infection- as well as complex gut penetration





models. Moreover – based on its specific pathogen free origin - this system represents a powerful new platform for recombinant expression in eukaryotic cells. Last but not least MicroMol is able to implement specialized customer orientated demands, including PCR strategies, cloning and expression of recombinant proteins and detection strategies in a reasonable time frame.

In addition to that MicroMol's food branch (Food Production Quality Service; http://www.fpqs.de) provides sophisticated consulting strategies for food producers according to international guidelines, among them the ISO 22000:2005, IFS and BRC. In this regard MicroMol offers a special laboratory platform for the evaluation of food samples, the determination of microorganisms and microbial contamination in nutrition, fermenter cultures and other substrates as well as the determination of food allergens with immunological test systems.

MicroMols Lab Services are accredited according to the standard ISO 17025:2005



MicroMol GmbH

Hedwigstr. 2-8 D-76199 Karlsruhe Phone: +49 (0) 721/94 15 213 Telefax: +49 (0) 721/94 15 214 info@micromol.com • info@fpqs.de www.micromol.com • www.fpqs.de

Contact person: Dr. Wolfgang Rudy Employees: 30

Production range/Services:

- Implementation of Western blotting and ELISA applications
- Epitope determination/scanning of proteins and antibodies
- Generation and evaluation of specific antisera
- Advanced Microbiology
- Microbiological analysis of food samples
- Implementation of PCR strategies
- Cloning on demand
- Generation, expression and purification of recombinant proteins in prokaryotic and eukaryotic systems
- Advanced tissue culture applications
- Detection and determination of bacteriophages
- Determination of cytotoxicity, skin corrosion and irritation according to DIN/ISO 10993-5 and OECD 431
- Development of functional cell culture models

- Agriculture/Food
- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- Production Organisms
- Proteins/Peptides

🗮 BIOPRO Baden-Württemberg 🛩



Innovations in Electrophysiology

Multi Channel Systems MCS GmbH

Aspenhaustr. 21 D-72770 Reutlingen Phone: +49 (0) 7121/90 92 50 Telefax: +49 (0) 7121/90 92 511 info@multichannelsystems.com

Contact person: Karl-Heinz Boven

Branches:

10 distribution partners worldwide

Employees: 45

Production range/Services:

- Recording systems for in vitro and *in vivo* electrophysiology: Complete multi-channel systems for extracellular recording for neuronal and cardiac applications
- Automated injection and screening devices for Xenopus oocytes
- Stimulus generators for current and voltage stimulation
- Data acquisition systems, amplifiers, and microelectrode arrays
- Software for data acquisition, analysis, and stimulation

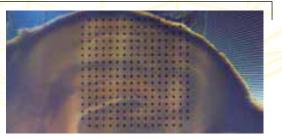
Fields of action:

- Analytics
- Bioinformatics
- Custom Production
- Supplier

The success of the medium-sized business Multi Channel Systems is based on its constantly growing highly-specialized work force. The majority of the creative team holds a PhD in physics, biology, electronics, computer sciences or engineering. The wide variety of experiences is incorporated in the development of innovative high-tech products.

Multi Channel Systems MCS GmbH was founded in 1996 and is based in the Science and Technology Park in Reutlingen in Southwest Germany, from where it operates globally. The main focus of our company is the development of precision scientific measuring instrumentation and equipment in the field of electrophysiology for research groups at universities and for the pharmaceutical industry. Because of their modular principle, our products can be extended and adjusted to specific experimental needs.

Our goal is the consequential implementation of customer-oriented and innovative technologies. The development according to customers' needs means development near to the specific



applications. Our team has research experience and knows the daily work in laboratories and its problems. Thus, we can develop products researchers really need.

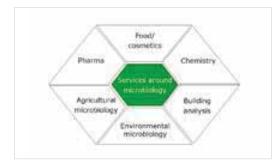
Furthermore, we are in permanent dialog with scientists and strive to be at the cutting edge of technology. This opens up our high innovation potential. Additionally, we are constantly involved in several national and international projects pushing the limits and developing innovations constantly.

All this, as well as over 15 years of experience and over 700 satisfied MEA-System users world-wide make us the global market leader in the field of non-clinical microelectrode array electrophysiology. In doing so we are assisted by 10 distribution partners worldwide.



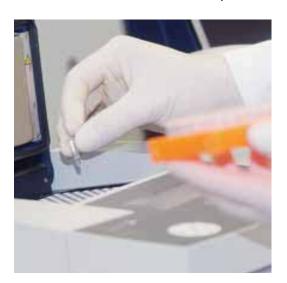
nadicom Gesellschaft für angewandte Mikrobiologie mbH

nadicom is a leading international operating GMP-certified biotech company specialising in the identification and characterisation of bacteria and fungi in pure cultures, environmental samples and complex mixed cultures.



Our company is active for the pharmaceutical, food, cosmetics, chemical and agricultural industry as well as in building analyses.

For the identification of micro-organisms, the most modern molecular-biological methods are applied. Qualitative identification of bacteria, fungi and yeast from pure cultures is carried out via PCR-based methods. To exactly iden-





tify micro-organisms, nadicom's exclusive database "tree by nadicom" containing more than 45,000 validated entries, is applied.

For the root-cause analyses of microbial contaminants we offer genotyping. In this sector we have established various validated methods of DNA-fingerprints for bacterial and fungal strains.

nadicom's knowledge database "fybase by nadicom" has been created to offer our clients a fast and comprehensive description of the results obtained in laboratory services. Our growing database gives a broad overview about the prevalent micro-organisms (more than 500 species) present in the pharmaceutical laboratory including detailed description, classification, risk evaluation and literature.

Contracted research represents another focus of the range of services offered. Here, nadicom currently works with partners in environmental microbiology. The main focus is here on the stimulation of plant-microbe interactions.

Our services are completed with educational seminars for laboratory personnel in industry and secondary education and consultation in the field of microbiology and environmental monitoring.



nadicom Gesellschaft für angewandte Mikrobiologie mbH Hertzstr. 16 D-76187 Karlsruhe Phone: +49 (0) 721/60 84 44 81 Telefax: +49 (0) 721/60 84 46 18 info@nadicom.com

Contact persons: Dr. Bernhard Nüßlein (CEO), Anja Dolderer (PR)

Branches:

Karlsruhe and Marburg (Germany)

Employees: 8

Production range/Services:

- GMP-compliant identification of microbial isolates (bacteria, fungi, yeasts)
- Molecular-biological identifica-
- tion of moulds and dust samples
- DNA fingerprinting
- Education and consultation
- Genotyping

- Analytics
- Bioinformatics
- Biotechnological Services
- Contract Research
- DNA/RNA
- Environmental Biotech

See BIOPRO Baden-Württemberg 🛩



nanoTools Antikörpertechnik GmbH & Co. KG Tscheulinstr. 21 D-79331 Teningen Phone: +49 (0) 7641/45 56 70 Telefax: +49 (0) 7641/45 56 71 info@nanotools.de www.nanotools.de

Contact person:

Dr. Petra Schüssler

Employees: 17

Production range/Services:

- Monoclonal antibodies for autophagy
- Cell biology
- Oncology
- Signal transduction
- Alzheimer research

Fields of action:

- Supplier
- Proteins/Peptides

NanoTools Antikörpertechnik is a science driven, product and customer oriented company providing monoclonal and polyclonal antibody development services and products. The company was founded in 1994 and is privately owned. It currently occupies close to 1,000 square meters laboratory facility in Teningen near Freiburg.

Besides providing individually tailored custom solutions, the company develops, manufactures and markets phosphorylation and modification-state specific monoclonal antibodies and other innovative reagents for signal transduction and Alzheimer research, high-throughput screening (HTS) and proteomics.

Custom Antibody Development and Production

nanoTools Antikörpertechnik offers specialized services for the development of antigens and mono- and polyclonal antibodies. We focus on providing individual solutions that are specifically tailored to optimally suit our customer's needs. Because of our vast experience in protein chemistry and antibody design, we are particularly well-qualified for the development of antibodies directed to "difficult epitopes" such as highly conserved proteins, neoepitopes, haptens and phosphorylated epitopes. Small and large scale antibody production is performed by serum-free cell culture techniques.

Antibodies are purified by non-denaturing chromatographic methods and either delivered in liquid form or lyophilized according to our customer's specifications. Antibodies may be labelled with Biotin, fluorescent dyes or enzymes on request.

Innovative Products for Cell Biology and Signal Transduction Research

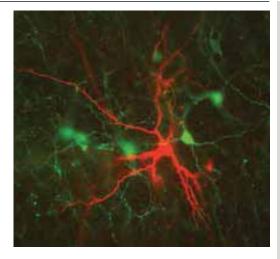
With regard to our own products, nanoTools Antikörpertechnik develops new innovative tools for signal transduction research and related fields. One important example is the development of "phosphorylation site" – specific antibodies that distinguish between the activated (phosphorylated) and nonactivated forms of signalling molecules.



The company npi electronic GmbH develops and produces measurement equipment for use in the life sciences (physiological and pharmacological basic research).

The company npi electronic GmbH was founded in 1989. Based on developments of Hans Reiner Polder during his diploma thesis in 1984, existing intracellular measurement procedures could be improved enormously. By the years, a complete appliance portfolio for the registration of bioelectrical signals was developed, expanded by systems for substance applications, micromanipulators, recording chambers and supported by a software for data acquisition and experiment control.

Today the product and service offer includes development of new measurement processes, custom specific equipping of laboratories as well as training of the employees. Instruments from npi electronic GmbH combine modern electro-



nics and control theory and make them available for researchers in life sciences. One of the most ambitious recent projects was the development of the ScreeningTool for high-quality automated drug screening using Xenopus oocytes.

npi electronic GmbH is also an industry partner in the CMPB in Göttingen, and of the Bernstein Center for Computational Neuroscience in Munich.



npi electronic GmbH

Hauptstr. 96 D-71732 Tamm Phone: +49 (0) 7141/9 73 02 30 Telefax: +49 (0) 7141/9 73 02 40 support@npielectronic.com www.npielectronic.com

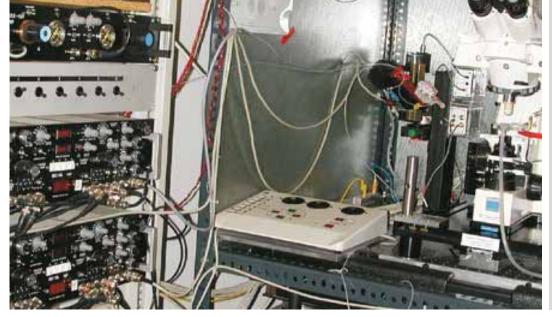
Contact persons: Dr. Martin Weskamp

Employees: 10

Production range/Services:

Voltage clamp amplifiers, patch clamp amplifiers, bridge amplifiers, extracellular amplifiers, micromanipulators, perfusion systems, iontophoresis systems, drug application systems, chambers, temperature controllers, data acquisition systems, stimulus isolators

- Custom Production
- Supplier



🗮 BIOPRO Baden-Württemberg 🛩



n-bio GmbH

Max-Stromeyer-Str. 116 D-78467 Konstanz Phone: +49 (0) 7531/45 71 89 0 Telefax: +49 (0) 7531/45 71 89 90 m.schuster@n-bio.de www.n-bio.de

Contact person:

Michael Schuster

Production range/Services:

- Biogas from organic waste
- Feasibility studies
- Planning of biogas plants
- Project management
- Biogas for agriculture
- Microbiology

Fields of action:

• Environmental Biotech



Efficient solutions for a clean environment

Our company n-bio is your competent partner for the production of biogas from organic waste and renewable crops. Our staff has more than 10 years of experience in designing, building and operating biogas plants.

Extensive knowledge of both plant engineering and microbiology enables us to build tailormade high quality biogas plants in accordance with industrial standards. Our company specializes in the anaerobic digestion of organic waste such as supermarket waste, kitchen waste and waste from the food industry.

n-bio is a subsidiary company of FARMATIC Anlagenbau GmbH combining our excellence in process engineering with 50 years of bolted steel tank construction and the design of highly efficient vertically stirred tall digesters. Vertically stirred tall digesters based on the CSTR principle are superior to conventional AD systems because of their higher energy efficiency and better intermixing of the substrate. They require very little maintenance and can be erected worldwide with consistent quality.

n-bio designs, builds and commissions complex biogas projects for agricultural, industrial and communal customers alike. From preliminary designs or feasibility studies for project developers all the way to execution planning and construction supervision – the engineering experience of n-bio is your key to success in bioenergy. We have an impressive record of successfully completed international projects in the UK, Scandinavia, Austria and the Baltics.

If you are looking for a competent engineering partner for international projects, do not hesitate to contact n-bio at our offices in Constance.







Oncotest is a CRO specialised on preclinical efficacy profiling of novel anti-cancer molecules. Promising indications and potential biomarkers are identified using a combination of *in vitro* and *in vivo* studies with Oncotest's extensively characterized collection of more than 350 unique patient-derived tumor xenografts (PDX) growing in nude mice. Oncotest has an industry-leading experience, gained by pioneering the rapidly growing xenograft field, and a more than 20-year track record since then. The company is exclusively focused on oncology and has a highly committed and expert team, supporting its customers throughout tailoring and execution of their studies.

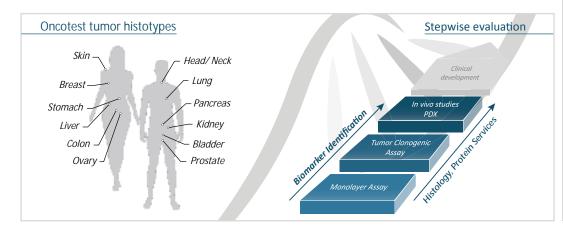
Oncotest offers a sophisticated system for stepwise screening of compounds and tumor types: The **monolayer assay** is a 2D high throughput screen for a broad range of compounds based on a cell proliferation assay, supporting late discovery/ early development. Oncotest provides more than 200 cell lines, 60 of which are proprietary.

For the tumor clonogenic assay (TCA) more than 300 PDX models can be resected directly from mice and prepared as cell suspensions to provide a useful tool for guiding *in vivo* studies. Oncotest's new 96 well clonogenic assay allows for very fast and cost-efficient screening using these suspensions.

Once suitable tumor models are identified by the *in vitro* and *ex vivo* screenings, as well as pharmacological and molecular characterization, drugs can be profiled *in vivo*. Since Oncotest's patient-derived **xenografts (PDX)** are transplanted and passaged as solid tumor fragments and not cell lines, they retain relevant characteristics of the donor material such as tumor architecture, molecular and protein alterations. This contributes to making these models highly predictive with respect to the patient situation.

Biomarker hypothesis can be derived by correlating pharmacological data from Oncotest's assays with molecular characteristics. Oncotest's tumor model collection is sufficiently large to enable early biomarker identification for novel compounds, already in a preclinical setting with a meaningful study size.

Since all Oncotest assays are based on proprietary PDX models, customers are enabled to use the same models for all studies in a stepwise and streamlined approach towards clinical trials. Oncotest's competence in assay system integration guarantees efficient testing with accurate and relevant results, ultimately reducing the attrition rates in clinical trials and bringing better drugs to the market faster.



Oncotest GmbH

Am Flughafen 12-14 D-79108 Freiburg Phone: +49 (0) 761/5 15 59 14 Telefax: +49 (0) 761/5 15 59 55 info@oncotest.de www.oncotest.de

Contact person: Prof. Dr. H. H. Fiebig, CEO

Employees: 80

Production range/Services:

Oncotest offers *in vitro* and *in vivo* screens on permanent tumor cell lines (monolayer assay) or patientderived xenografts (clonogenic assay and *in vivo* studies), early biomarker identification, and mechanism of action studies in Oncology

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- DNA/RNA
- Proteins/Peptides
- Therapeutics

Reference BIOPRO Baden-Württemberg



PANATecs GmbH

Inselwiesenstr. 10 D-74076 Heilbronn Phone: +49 (0) 7131/79 70 40 Telefax: +49 (0) 7131/79 70 42 99 info@panatecs.com www.panatecs.com

Contact person:

Dr. Thomas Frischmuth (CEO)

Employees: 20

Production range/Services:

- CMC (chemistry manufacturing and controls) and protein characterization
- R&D analyses and peptide synthesis
- Life Science Tools for use in protein analysis, immunology and cell biology

Fields of action:

- Analytics
- Biotechnological Services
- Custom Production
- Proteins/Peptides
- Supplier

PANATecs is a service provider for protein analysis and a manufacturer of diagnostic products. PANATecs has been awarded the ISO 9001 Certificate. The company possesses manufacturing authorization for test laboratories in accordance with §13 of the 15th Amendment of the Medicines Act.

For almost 10 years, PANATecs has been performing essential work for the pharmaceutical, diagnostic testing and biotechnology industries. With its team of highly qualified scientists and technicians – all with experience of industry - PANATecs supports technological progress in the Life Sciences industry.

PANATecs Services:

CMC AND PROTEIN CHARACTERIZATION:

PANATecs offers analytical characterization of proteins and antibodies, as well as method development and analyses for GMP release. Much of PANATecs' work deals with mass spectrometric studies of active substances.

R&D ANALYSES AND PEPTIDE SYNTHESIS:

The routine mass spectrometric analyses, N-terminal sequencing and quantitative amino acid analyses make PANATecs the ideal partner for resolving problems in early R&D. PANATecs synthesizes customer-specific peptides in their own peptide synthesis laboratory. The company specializes in unusually long or complex proteins, obviously with reliable quality control.



LIFE SCIENCE TOOLS:

PANATecs is an established developer of innovative life science tools for use in protein analysis, immunology and cell biology. The products are used as instruments for screening T-cell immune reactions and for controlling protein production.

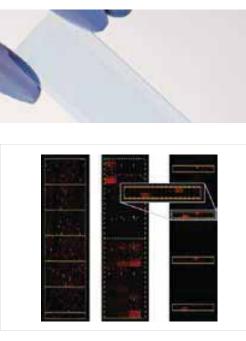


PEPperPRINT is a young and innovative biotech company based in Heidelberg and a spinoff of the German Cancer Research Center. The company provides the new peptide microarray platform PEPperCHIP[®] for immunological research, biomarker discovery and peptide drug development. Due to its proprietary and awardwinning peptide laser printing technology, the high-content PEPperCHIP[®] microarrays set a new standard in terms of peptide diversity, signal quality and content flexibility.

The PEPperCHIP[®] platform is predominantly applied for antibody characterization by epitope mapping and epitope permutation scans. PEPper-CHIP[®] microarrays further allow the profiling of antibody immune responses in blood sera linked with infection, immunization, autoimmune diseases or cancer. Besides antibody analysis, PEPper-CHIP[®] microarrays are a perfect tool for kinase substrate profiling and the incorporation of unnatural amino acids makes PEPperCHIP[®] microarrays also suitable for peptide drug optimization.

The PEPperMAP[®] services enable to benefit from PEPperPRINT's new peptide microarray platform PEPperCHIP[®] without any need for time, manpower or technical infrastructure. They include microarray design and synthesis as well as immunoassays, read-out, data evaluation and reporting.

PEPperPRINT's portfolio is complemented by PEPperSlides[®] NHS Glass Slides, which are the ideal substrate for covalent immobilization of proteins such as antibodies, antibody fragments, enzymes or receptors. PEPperSlides[®] NHS Glass Slides are based on a sophisticated 3D polymer coating that blocks non-specific protein interaction 100times better than BSA.





PEPperPRINT GmbH

Rischerstr. 12 D-69123 Heidelberg Phone: +49 (0) 6221/72 64 488 Telefax: +49 (0) 6221/72 64 475 info@pepperprint.com www.pepperprint.com

Contact person: Dr. Volker Stadler

Production range/Services:

- PEPperCHIP® Peptide Microarrays for clinical & biomedical research (epitope mapping, serum antibody profiling, kinase substrate screening...)
- PEPperMAP[®] comprehensive peptide microarray analysis service
- PEPperSlides[®] NHS Glass Slides for protein immobilization

- Analytics
- Biotech Services
- Custom Production
- Diagnostics
- Proteins/Peptides
- Therapeutics

See BIOPRO Baden-Württemberg 🗲



Peptide Specialty

Laboratories GmbH Im Neuenheimer Feld 583 D-69120 Heidelberg Phone: +49 (0) 6221/88 96 12 Telefax: +49 (0) 6221/88 96 13 info@peptid.de www.peptid.de

Contact person:

Dr. H.-R. Rackwitz

Employees: 7

Production range/Services:

- Peptides
- Bioconjugates
- Polyclonal antibodies in guinea pigs and rabbits

Fields of action:

- Custom Production
- Proteins/Peptides
- Supplier

Peptide Specialty Laboratories (PSL) GmbH was founded in August 2000 as a spin-off company of the German Cancer Research Center (DKFZ) in Heidelberg, Germany. The company is located within the Technology Park Heidelberg in direct neighborhood of university institutes, university hospitals and other biotech companies.

The major goals of the PSL GmbH are the production and marketing of peptides, peptide analogues, bioconjugates and peptide specific antisera. Dr. Hans-Richard Rackwitz, one of the cofounders and manager of the PSL GmbH, has many years of experience in the field of peptide synthesis and antibody production, which is well documented in a large number of publications.

The instrumentation of PSL GmbH allows the simultaneous syntheses of up to 144 peptides with a chain length of up to 30 amino acids. Highly optimized synthesizers are set up to yield peptide amounts of up to one gram. These synthesizers also enable the syntheses



of peptides with chain lengths of 50 or more amino acids.

Furthermore, services of PSL GmbH include the purification of the peptides by HPLC as well as HPLC analysis and MALDI-TOF mass spectrometry for synthesis and purity control. Our main customers are found within the industry and the research community of Germany and the European Community but we also serve any customer around the world.

Information about our products and prices are available in the internet under http://www.peptid.de.

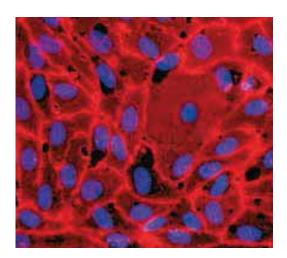


Promo Cell

For more than 20 years PromoCell has been a reliable supplier of biomedical products to research and industry. We are an ethically responsible partner in all areas of cell culture research and associated specialist fields. Due to the quality of our product range and the reliability of our advice and service, we are now the leading European manufacturer in the field of primary human cell culture. Serum- and protein-free PromoCell media open up new opportunities in the areas of tissue engineering, protein expression and process standardisation within cell culture. With the PromoKine product line, we provide a wide range of cell biology tools.

Customers are invited both to consult our advisory service and to visit our PromoCell Academy, to take full advantage of our extensive expertise. It will be rewarding for us to know that we have contributed to your success.

PromoCell is active globally, with own sales representatives and a distribution network spread across many countries.





Our Sales Philosophy

PromoCell has specialists in your field. You can be offered skilled advice on choosing and applying the correct PromoCell product. In addition this knowledge will be delivered to you in your own native language. For this purpose and for your convenience we have established the Cell Line (free phone line) in France, Germany, the United Kingdom and the United States of America.

We Welcome Your Requests and Suggestions

Our current programme is the result of your wishes and suggestions. PromoCell is committed to providing its customers, at all times, with appropriate and innovative solutions to their queries, in the form of both products and technical support. Your satisfaction with PromoCell products will be guaranteed through a dynamic interaction with ourselves. Contact PromoCell. We are here to help you.

PromoCell GmbH

Sickingenstr. 63/65 D-69126 Heidelberg Phone: +49 (0) 6221/64 93 4 0 Telefax: +49 (0) 6221/64 93 4 40 info@promocell.com www.promocell.com www.promokine.info www.promocell-academy.com

Contact person: Dr. Irma Börcsök

Employees: 55

Production range/Services:

- Normal human cells from different locations, e.g. skin, bloodvessels, fat tissue, bones
- Stem and blood cells
- Cell-type specific media, low serum, serum-free
- Cell Biology Tools: Transfection
 Cell analysis kits
- Cytokines and ELISAS
- Classical media
- Buffers; bio-reagents

- Cells/Cell Lines
- Supplier

🗮 BIOPRO Baden-Württemberg 🛩



ProQinase GmbH

Breisacher Str. 117 D-79106 Freiburg Phone: +49 (0) 761/2 06 17 80 Telefax: +49 (0) 761/2 06 17 81 info@proqinase.com www.proqinase.com

Contact person:

Dr. Christoph Schächtele

Employees: 37

Production range/Services:

- Recombinant protein kinases & substrates
- Biochemical assay services: HTS, IC₅₀-profiling
- Cellular assay services
- In vivo testing services
- Angiogenesis assay services

Fields of action:

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- Proteins/Peptides
- Therapeutics

Company Focus and Future Perspective

ProQinase is a leading biology contract service provider (CRO) dedicated to support pharmaceutical and biotech companies in the development of novel therapies for cancer treatment. The company has a long-lasting scientific experience in the fields of tumour angiogenesis and protein kinase research as proven by its contribution to two successful development projects in cancer going from scratch to clinical trials in Phase I and Phase III.

Products & Services

ProQinase has established a comprehensive Cancer Drug Discovery Platform which comprises the following products and services:

- More than 280 recombinant protein kinases
- Screening services with more than 380 protein kinases (HTS, IC₅₀ and large scale profiling) with rapid turnover in high speed robotic systems
- Cellular assays, target-specific and phenotypic assays, e.g. proliferation and colony formation assays
- *In vivo* models, subcutaneous and orthotopic test systems





 Angiogenesis assays: cellular assay and *in vivo* model based on spheroids from human endothelial cells

Moreover ProQinase enables rapid access to clinical trials due to its affiliation with the Tumor Biology Center Freiburg, Germany.

Business and Deals

Most of the largest pharma companies are among our customers. We are offering

- Frame work contracts for the service business
- Standard discounts
- Attractive conditions

Background

ProQinase was founded 2001 as a subsidiary of the Tumor Biology Center Freiburg, one of the largest privately owned hospitals of this type in Europe, to market the broad know-how about protein kinases. Our team of internationally trained scientists owns more than 20 years of scientific expertise in protein kinase and signal transduction research, coming both from the industrial and academic area.

Knowledge-based custom specific products and consultance for the life sciences

Q-bios GmbH, founded in 2009, is a spinoff from the Institute for Molecular and Cell Biology, Department of Biotechnology, at the Mannheim University of Applied Sciences. Q-bios provides services for the life sciences in general and the biotechnology and pharmaceutical industry in particular. The success of Q-bios is based on broad knowledge and long-time experience of the two company's founders in microbiology, molecular and cell biology, genetics, medical genetics and protein analytics. This allows for customer-specific solutions.

Q-bios provides services in bulk or retail recombinant protein production using bacterial, insect cell and eukaryotic cell expression systems, as well as molecular and cell biology assay development and production. All customers profit from our project specific counselling service. Products can be purchased directly from us or are marketed by a distributor. Many of our products are intermediates and are used by nationally and internationally acting diagnostica companies.

One of Q-bios' major products is the production and client-specific formulation of the thermostable DNA polymerase from Thermus aquaticus (Taq). We offer Taq polymerases with variable activity concentrations (1 U/ μ l - 60 U/ μ l) formulated, for example, as a HotStart-Taq suited for real-time PCR or as Taq in glycerol free storage buffer. In addition, we provide Taq polymerases of different purity grades ranging from regular preparation grade to DNA-free



Taq. Q-bios has started to specialise on the manufacturing of client-specific PCR Master Mixes for real-time PCR and diagnostic purposes. Furthermore, all of our PCR related products and PCR Master Mixes are offered in a lyophylised form.



Q-bios GmbH

Paul-Wittsack-Str. 10 D-68163 Mannheim Phone: +49 (0) 621/29 26 53 7 Telefax: +49 (0) 621/43 95 53 2 contact@q-bios.com www.q-bios.com

Contact person:

Dr. rer. nat. Andreas Lux

Employees: 3

Production range/Services:

- Recombinant proteins
- Antigens
- Taq polymerase
- PCR Master Mixes
- Assay development
- Training

- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- Diagnostics
- DNA/RNA
- Production Organisms
- Proteins/Peptides
- Supplier

Reference BIOPRO Baden-Württemberg



ravo Diagnostika GmbH

Oltmannsstr. 5 D-79100 Freiburg Phone: +49 (0) 761/40 74 88 Telefax: +49 (0) 761/40 74 77 info@ravo.de www.ravo.de **Contact person:**

Dr. Christiane Rasiah

Employees: 11

Production range/Services:

- Indirect hemagglutination assays for the diagnosis of: Aspergillus fumigatus, Candida albicans, Borrelia burgdorferi, Helicobacter pylori and Leptospira
- ELISA's for the diagnosis of infections with Candida albicans, Borrelia burgdorferi and Helicobacter pylori.
- Line Assays (Immunoblots) for the detection/diagnosis of:
- Paraneoplastic autoantibodies anti-HuD, anti-Yo, anti-Ri, anti-Amphiphysin, anti-CV2 (CRMP5), anti-Ma1, anti-Ma2 (Ta) and anti-SOX1.
- Autoantibodies anti-GAD65
- Autoantibodies anti-MAG
- Lyme disease
- ISAGA's and DIFA for the diagnosis of Toxoplasmosis

Fields of action:

• Diagnostics

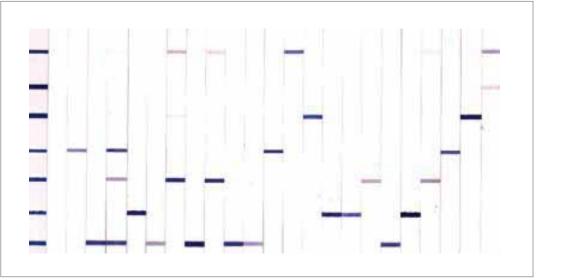
ravo Diagnostika was founded in 1995 by Prof. Dr. med. Arnold Vogt, former director of the Department of Immunology of the Institute of Medical Microbiology and Hygiene, Albert-Ludwigs-University in Freiburg, Germany, and two of his co-workers, Dr. rer. nat. Christiane Rasiah and Dr. med. Sebastian Rauer.

We focus our activities to development and production of immunoassays for the diagnosis of infectious and autoimmune diseases and we set a high value on good quality and support.

Our customers are medical laboratories all over the world. The product range comprises indirect haemagglutination assays, enzyme-linked immunosorbent assays, immunefixation assays and immunoblots.

We introduced a Quality System according to EN ISO 9001 and EN ISO 13485 and according to the Council Directive 98/79/EC, Annex IV- Section 3.





rent-a-lab

We offer:

• [125I]-iodination service

for peptides, antibodies, DNA etc. with common methods (chloramine T, lactoperoxidase etc.)

- receptor binding assays classical receptor saturation, homologous displacement, heterologous displacement with [³H]- [¹⁴C]- and [¹²⁵I]-labelled ligands
- *in vivo* receptor occupancy studies after application of test compounds in rat and mice



rent-a-lab operates a modern radionuclide laboratory

• enzyme assays

with radioactive or absorption read-outs

• transmitter reuptake

into rat synaptosomes (presynapses)

• RIAs

with [³H]- and [¹²³I]-labelled tracers to quantify target molecules in serum/plasma or tissue extracts

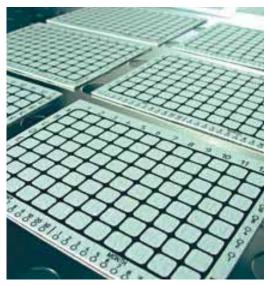


A 96-well harvester for microplate assays ...

• pharmacology of GPCRs

by [³⁵S]GTPgS binding tests (functional) to investigate G protein activation (also available: Ga-subtyp-specific assays)

Services are customized to meet specific needs reaching from individual small scale solutions to microplate solutions for medium-throughput screening (MTS).



... enabling e.g. [35S]-GTPYS-screens

rent-a-lab Dr. Carsten Tober

Aspenhaustr. 25 D-72770 Reutlingen Phone: +49 (0) 7121/51 53 67 0 Telefax: +49 (0) 7121/51 53 67 9 info@rent-a-lab.biz www.rent-a-lab.biz

Contact person: Dr. Carsten Tober

Employees: 3

Production range/Services:

- Custom labelling service with [¹²⁵I]
- Enzyme assays
- Transmitter reuptake
- Receptor binding assays
- GPCR pharmacology
- RIAs
- In vivo receptor occupancy assays
- Receptor mutagenesis studies

- Analytics
- Biotechnological Services
- Contract Research

🗮 BIOPRO Baden-Württemberg 🛩



THE BIOPHARMA MANUFACTURE

Rentschler Biotechnologie GmbH

Erwin-Rentschler-Str. 21 D-88471 Laupheim Phone: +49 (0) 7392/70 15 55 Telefax: +49 (0) 7392/70 14 00 info@rentschler.de www.rentschler.de

Contact person:

Dr. Alexander Götz

Branches: 1 (USA)

Employees: 650

Production range/Services:

Advanced Services:

- Corporate project management
- Cell line development
- Bioprocess development
- Production of active pharmaceutical ingredients (API)
- Formulation, fill and finish
- Quality control
- Regulatory affairs
- Quality assurance

Fields of action:

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- Production Organisms
- Proteins/Peptides
- Therapeutics

Rentschler Biotechnologie GmbH is an international full-service contract manufacturer with a highly skilled staff of 650 and has more than 35 years of experience in the development, production and approval of biopharmaceuticals in compliance with international GMP standards. Regulatory advice and fill and finish are part of the company's service range. As a pioneer in the development and production of biopharmaceuticals, Rentschler was the first company in the world to gain market authorization for an interferon-containing drug. Dedicated to deliver high-quality biopharmaceuticals produced in mammalian cell culture, Rentschler has nine stand-alone GMP suites with volumes of 30, 50, 100, 250, 500, 1,000 and 2,500 liters, allowing the production of material for clinical trials and for supplying the market.

Rentschler provides customized, integrated biopharmaceutical services, from cell line to the development and production of the active ingredient and from marketing authorization to fill and finish. The long-term experience of Rentschler Biotechnologie combined with the range of comprehensive services ensures the

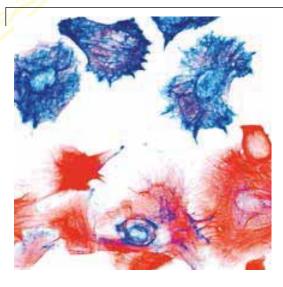




success of any project – rapidly and reliably. Rentschler is flexible when it comes to services, capacity and products – for process development or production of materials for clinical trials and the market, whether lowdose cytokines or high-dose antibodies and biosimilars.

Rentschler Biotechnologie is a responsible and experienced partner to implement project goals, coordinate operations and communicate progress updates to its customers. Combined with Rentschler's experience in international regulatory affairs and authorities, this speeds up the time to market and ensures the market success.





A Joint Venture between a strong partner and TICEBA

Founded in 2012 RHEACELL is dedicated to the development of human pharmaceuticals based on ABCB5 positive mesenchymal skin stem cells. For selected indications RHEACELL strives for the improvement of quality of life as well as abatement and healing of ailments of patients.

RHEACELL is obligated to meet the requirements of the European law throughout the whole development process of stem cellbased pharmaceuticals. Similarly, latest international findings of science and technology as well as in-house know-how of RHEACELL's qualified staff play a key role in realizing the mission. The requirements of Good Manufacturing Practice will be met throughout the entire process.





As a licensee of a number of patents of Harvard University, Cambridge/USA, RHEACELL has worldwide exclusive rights to this technology. RHEACELL can make use of this technology when developing pharmaceuticals. Professor Dr Markus Frank, MD is assisting RHEACELL as scientific advisor. He has particular expertise in stem cell research.

RHEACELL GmbH & Co. KG

Im Neuenheimer Feld 517 D-69120 Heidelberg Phone: +49 (0) 6221/71 833 0 Telefax: +49 (0) 6221/71 833 29 office@rheacell.com www.rheacell.com

Contact person:

Dr Christoph Ganss, MD Professor Dr Markus Frank, MD

Branches:

Offices and laboratory at technology park Heidelberg

Production range/Services:

• Drug development based on stem cells

- Cells/Cell Lines
- Custom Production
- Supplier

Reference BIOPRO Baden-Württemberg



Roche Diagnostics GmbH Roche Diagnostics Deutschland GmbH Sandhofer Str. 116 D-68305 Mannheim Phone: +49 (0) 621/75 90 mannheim.allgemein@roche.com

Contact person:

Dr. Monika Mölders

Fields of action:

- Analytics
- Diagnostics
- DNA/RNA
- Proteins/Peptides
- Therapeutics

Roche Diagnostics

Headquartered in Basel, Switzerland, Roche is a leader in research-focused healthcare with combined strengths in pharmaceuticals and diagnostics. Roche is the world's largest biotech company with truly differentiated medicines in oncology, virology, inflammation, metabolism and CNS. Roche is also the world leader in in-vitro diagnostics, tissuebased cancer diagnostics and a pioneer in diabetes management. Roche's personalized healthcare strategy aims at providing medicines and diagnostic tools that enable tangible improvements in the health, quality of life and survival of patients. As one of the hubs of the Group's diagnostics business, Roche Mannheim plays a central role. The Rhine-Neckar Metropolitan Region with its biotech clusters provides the company with an excellent research and development environment. Roche Mannheim is the third largest site in the Roche Group and one of the most diverse. It is a major operational hub for the Group's Diagnostics Division and headquarters of the division's Diabetes Care unit. Activities at the site include research and development, production, strategic marketing and global logistics for the Diagnostics Division and production and packaging of finished biopharmaceuticals for Roche's Pharmaceuticals Division. More than 7,500 people are employed at the site.



Sciomics – Antibody meets microarray

Sciomics GmbH was founded in spring 2013 as a spin-off company of the German Cancer Research Center (DKFZ). Since 2003 our team is experienced in the production and application of antibody microarrays as a tool for the analysis of complex protein samples. Sciomics offers a complete analysis service of your samples with standardised as well as customised arrays.

Analyse your protein sets of interest

Using antibody microarrays it is possible to analyse complete signalling pathways, up-/downstream elements of your protein of interest or hits from next generation sequencing. For such an analysis only very small sample volumes such as 15µL are needed. This facilitates a robust and multiplex analysis of plasma or tissue proteins not only from human but also from murine samples.

We offer standardised arrays or produce customised arrays for your list of targets or with your selection of antibodies. Based on more than a decade of experience in profiling studies with antibody microarrays, we also offer a complete



analysis service including the protein extraction from plasma, serum, tissue or cell culture samples, the sample labelling, the incubation as well as the subsequent data analysis.

Identification of protein biomarker signatures

In addition, antibody microarrays are a valuable tool for the identification or verification of protein biomarkers. Based on complex antibody microarrays, biomarker signatures were identified for a prognosis in bladder cancer and a diagnosis of pancreatic cancer. Contact us to learn more about the potential of complex antibody microarrays for your protein biomarker screening or verification study.



Sciomics GmbH

Schneidmühlstr. 19 D-69115 Heidelberg Phone: +49 (0) 6221/32 71 23 3 info@sciomics.de www.sciomics.de

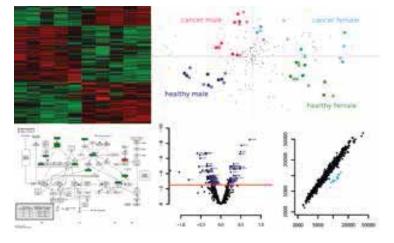
Contact person:

Dr. Christoph Schröder

Production range/Services:

- Custom antibody microarrays
- Analysis service
- Proteomic profiling
- Antibody characterisation
- Biomarker discovery and verification

- Analytics
- Biotechnological Services
- Custom Production
- Diagnostics
- Proteins/Peptides



Typical results of an antibody microarray profiling study

BIOPRO Baden-Württemberg



SEARCH-LC GmbH Bergstr. 140 D-69121 Heidelberg Phone: +49 (0) 6221/41 86 04 Telefax: +49 (0) 6221/41 86 08 info@search-lc.com www.search-lc.com

Production range/Services: Parameter-specific kits for the LightCycler[®] system of ROCHE Diagnostics

Fields of action:

- Analytics
- Biotechnological Services
- DNA/RNA
- Supplier

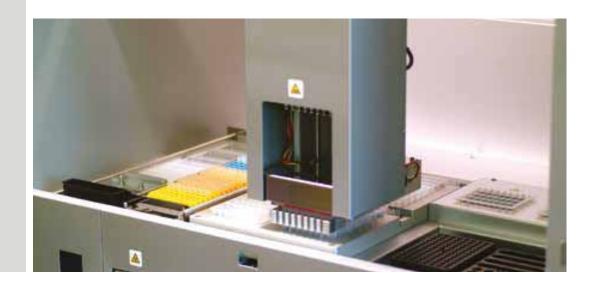




Search-LC GmbH was founded within an cooperation between ROCHE Diagnostics GmbH and the Institute of Immunology of the University of Heidelberg. The company offers currently more than 1,000 parameter-specific kits for the LightCycler[®] system of ROCHE Diagnostics.

On the diagnostic sector Search-LC GmbH has developed an assay which measures the individual degree of immunsuppression in patients using Calcineurinin inhibitors, which permitted an individual adaptation of the immunsuppressive therapy for the first time. This approach reduces the incidence of recurrent infections and malignant disease as well as the degree of the kidney damage in transplanted patients significantly, which greatly improves their long-term outcome. In the area of chronic-bowel disease Search-LC has identified multiparametric patterns, which measure the degree of inflammation in situ and can be employed to monitor anti-inflammatory therapy.

Another activity of the company is the evaluation of assays to detect micrometastases in sentinel lymph nodes.



Sensovation is focused on the development and manufacturing of unique innovative imaging systems. Sensovation offers intelligent optical detection solutions ranging from scientific cameras up to highly integrated instrumentation for multiplexed diagnostics.

Our product line includes a range of cooled, high resolution, high sensitivity scientific cameras for low-light imaging applications. These cameras are used in biotechnology and – with increasing demand – in the photovoltaic industry for characterization of solar cells and modules.

For the field of diagnostics and clinical research Sensovation offers solutions for multiplexed diagnostics, which enables simultaneous detection of several parameters in one sample. Sensovation currently offers microarrays readers in its multiplex series: CLAIR and FLAIR. CLAIR is an imaging reader for colorimetric read-out of microarrays on the bottom of



coolSamBa HR-320 scientific cooled camera for high sensitivity and high resolution imaging in biotechnology and diagnostics.



FLAIR Fluorescent Array Imaging Reader – automated microarray reader system for readout and analysis for fluorescent microarrays in 96-well plates.

the wells of 96-well plates. Other formats, e.g. slides can also be accommodated. FLAIR is designed for multiplex-enabled fluorescent read-out. The instruments are astonishingly compact and affordable and have been designed with routine applications in mind. Sensovation's instrument concept enables the easy transition of microarray applications from research to clinical routine. Thus Sensovation offers a new dimension in multiplexed imaging for diagnostics, pointof-care and biotechnology.

Sensovation is primarily active in the OEM business and also designs customer specific imaging products. With systems insight, Sensovation works together with diagnostic companies during the assay development process. The result is a cost efficient and application-tailored platform, with the tools and services needed for successful multiplexed analysis.



Sensovation AG

Markthallenstr. 5 D-78315 Radolfzell Phone: +49 (0) 7732/30 27 8 20 Telefax: +49 (0) 7732/30 27 8 39 info@sensovation.com www.sensovation.com

Contact person:

Dr. Hanswilly Müller

Employees: ca. 30

Production range/Services:

- SamBa scientific cameras
- CLAIR and FLAIR array imaging readers for multiplexed diagnostics
- Customized microscopy systems

- Analytics
- Diagnostics
- Supplier

See BIOPRO Baden-Württemberg 🗲



SGS M-Scan GmbH

Engesserstr. 4a D-79108 Freiburg +49 (0) 761/61 16 77 60 Phone: Telefax: +49 (0) 761/61 16 77 66 de.m-scan@sgs.com www.sgs.com/m-scan

Contact person:

Marie-Ann Dhaen Phone: +49 (0) 761/61 16 77 60 Dr. Pascale Seiter, Office Bonn Phone: +49 (0) 228/85 09 14 5

Branches: SGS M-Scan is part of the SGS Life Sciences Services group. SGS Life Science Services is the largest network of contract analytical laboratories with 19 facilities in 11 countries.

Employees: >65 within SGS M-Scan Europe

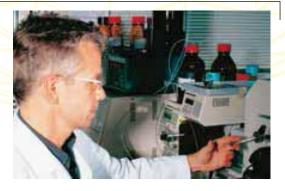
Fields of action:

- Analytics
- Biotechnological Services
- Contract Research
- DNA/RNA
- Proteins/Peptides
- Therapeutics

SGS M-Scan are the world's number one biopharmaceutical mass spectrometry & biophysical characterisation service provider with over 30 years of industry leading, global regulatory proven experience. At our laboratories in Germany ("Biotechpark" Freiburg), Switzerland, the UK and the US we provide GLP/cGMP compliant analyses for biopharmaceuticals, from small molecules/new molecular entities and peptides through to proteins and glycoproteins, such as monoclonal antibodies. To date, we have worked on the top 30 biological products that have made it to market, as well as on many other originator, biosimilar and biobetter products still in development.

We have extensive experience of applying our specialist analytical skill-set at all stages of the product lifecycle from cell line selection, process verification, pharmacokinetic & metabolism studies through to final product characterisation.

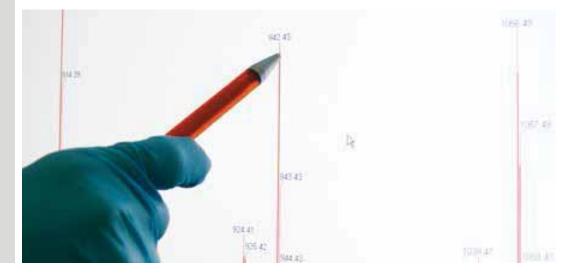
Analytical packages can be designed to conform to the appropriate FDA/EMA/ICH guidelines (e.g. ICH Q6B for structural and physicochemical characterization). As an experienced, professional, independent partner in drug development, SGS



M-Scan offers a global service and is dedicated to guiding and supporting clients from initial drug discovery through to full regulatory approval.

Production range/Services:

Structural, physicochemical and biophysical analysis of peptides, (glyco)proteins and antibodies: Amino Acid Analysis, N- and C-Terminal Sequencing, De Novo Protein Sequencing, Intact Molecular weight, Peptide Mapping, Disulfide Bridge Analysis, PTMs, Protein Aggregation (SEC-MALS, SV-AUC, DLS), Capillary Electrophoresis (cIEF), Liquid Chromatographic Patterns, Spectroscopic Profiles (CD, DSC, FTIR, NMR), Glycosylation Analysis (Glycosylation Site, Oligosaccharide Population, Monosaccharide Composition, Sialic Acid Analysis, Linkage Analysis, 2-AB Labeling) etc.





© Thomas Ernsting

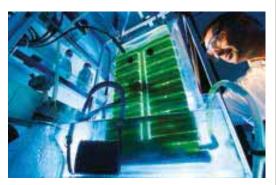
As a spin-off of the Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Subitec's platform technology is based on a specially designed low cost panel reactor built on the airlift-loop-principle (patent granted world-wide). In contrast to conventional photobioreactors, the flat-panel airlift (FPA) reactor achieves complete intermixing and hence improved light distribution to the cells. Through the installation of "static mixers" in the liquid flow, algal cells are transported by turbulence from the dark reactor zone to the illuminated surface layer at set intervals. The reactor achieves high cell densities thus enhancing the economy of the production process.

The FPA reactor is manufactured from two deepdrawn half-shells including the static mixers by twin-sheet-technology guaranteeing low production costs (patent granted). In a scale-up process the FPA reactor volume was enhanced from 6 to 180 litres.

In spring 2008, two pilot plants with 1.3 to 4 m³ reactor volume started operation using flue gas from combined heat and power units. Two other pilot plants in greenhouses are in operation since 2010.

Superior Technology:

- High scalability and modularity
- Use in both greenhouses and on open nonagricultural land
- Optimum light supply to the algae resulting from targeted flow with static mixers offsets limitations caused by poor light distribution and inhibition caused by high light intensity
- Much higher cell density in comparison with other reactors
- Low operating costs due to airlift-driven intermixing
- Net energy production is possible due to low energy input



© Thomas Ernsting



Subitec GmbH

Julius-Hölder-Str. 36 D-70597 Stuttgart Phone: +49 (0) 711/36 54 02 90 Telefax: +49 (0) 711/36 54 02 91 0 p.ripplinger@subitec.com www.subitec.com

Contact person: Dr. Peter Ripplinger

Employees: 10

Production range/Services:

- Photobioreactors
- Microalgae biomass
- Carotinoids
- Omega-3-fatty acids
- Biogas
- Biodiesel

- Agriculture/Food
- Environmental Biotech
- White Biotechnology

🗮 BIOPRO Baden-Württemberg 🛩

SYGNIS

SYGNIS Pharma AG

Im Neuenheimer Feld 515 D-69120 Heidelberg Phone: +49 (0) 6221/45 46 Telefax: +49 (0) 6221/45 47 00 contact@sygnis.de www.sygnis.de

Contact person: Pilar de la Huerta CEO/CFO

Branches:

X-POL BIOTECH, S.L.U. (Madrid, Spain)

Employees: 18

Production range/Services:

Polymerases, proteins and tools for molecular diagnostics and basic drug screening platform

Fields of action:

- Diagnostics
- DNA/RNA
- Proteins/Peptides



SYGNIS Pharma AG is a biotech company listed in the Prime Standard of the German Stock Exchange. Until the end of 2012 SYGNIS specialised in research and development of innovative therapies in the area of neurodegenerative diseases.

According to the 2012 newly defined business strategy and following the merger with Spainbased X-Pol Biotech, SYGNIS focuses on the development and marketing of novel technologies and products in molecular biology, e.g. in the field of DNA amplification, sequencing and drug screening. These technologies and products are targeted at the Life Sciences market in the areas of basic, applied and clinical research.

For the key product QualiPhi[™], an improved polymerase for amplifying DNA, an exclusive worldwide license has been granted to Qiagen in 2012. The Company expects first revenues based on this license in a short period of time.

In addition to QualiPhi[™] the Company has generated new mutant polymerases whose func-

tional features make them ideally suited for the Next Generation Sequencing equipment. Next Generation Sequencing is the fastest growing and most lucrative segment in the genomic space and is potentially the key to opening up the potential scale of personalised medicine.

Early 2013, SYGNIS has been granted the European and US patent for a new basic technology for the detection of protein-protein interactions, a screening platform for the development of novel drugs. Protein-protein interactions falls within the scope of proteomics, a field that is growing in importance for research into new customized drugs. SYGNIS' new platform can be used to improve the characterization of new drugs in development and identification of new therapeutic targets.

SYGNIS is seeking partnerships or outlicensing in the field of molecular diagnostic, in particular DNA amplification and sequencing.

In addition outlicensing opportunities for its drug screening platform (protein-protein interactions) are of high interest to SYGNIS.



SYMBIOSIS – The Analytical Company – is the business division of Biopharm GmbH offering services and solutions for biopharmaceuticals and classical pharmaceuticals.

SYMBIOSIS integrates the extensive experience and expertise of Biopharm GmbH in analytical services of more than 27 years combined with a customer-focused approach driven by excellence in process, communication and quality. GMP and GLP certified we operate according to the highest quality assurance standards.

SYMBIOSIS solutions are customer-driven sets of analytical methods designed to meet regulatory requirements. SYMBIOSIS solutions are designed to accelerate drug product development and to provide analytical support throughout drug product life cycles. An extensive range of methods combined with our expert knowledge provides accurate analysis and consistent results in accordance with GMP and GLP requirements.



N-terminal protein sequencing using Edman Sequencer (© SYMBIOSIS)



Analysis of drug substances and drug products of biopharmaceuticals and classical pharmaceuticals

- Stability testing according to ICH/FDA guidelines, incl. storage
- Release testing
- Development and validation of analytical methods in accordance with ICH/FDA guidelines
- Comparability testing (incl. Biosimilars/Biobetters)
- Safety testing, testing of clinical trial samples.

SYMBIOSIS offers an extensive set of analytical methods for a wide range of substances from small molecules to antibodies. We support you through all stages of the development life cycle of your product from discovery to market.



SYMBIOSIS,

part of Biopharm GmbH Handelsstr. 15 D-69214 Eppelheim Phone: +49 (0) 6221/53 83 0 Telefax: +49 (0) 6221/53 83 52 info@symbiosis.de www.symbiosis.de

Contact person: Stefan Künzig

Employees: 35

Production range/Services:

SYMBIOSIS offers an extensive set of analytical methods for a wide range of substances from small molecules to antibodies. We support you through all stages of the development life cycle of your product from discovery to market.

- Analytics
- Biotechnological Services
- Diagnostics
- Proteins/Peptides
- Therapeutics
- Tissue Engineering



Cell based assays (© SYMBIOSIS)

Reference BIOPRO Baden-Württemberg



SYNIMMUNE GmbH

Auf der Morgenstelle 15 D-72076 Tübingen Phone: +49 (0) 7071/29 78 843 Telefax: +49 (0) 7071/29 35 272 info@synimmune.com www.synimmune.com

Contact person:

Dr. Ludger Große-Hovest (CSO)

Production range/Services:

Synimmune is currently developing two optimized antibodies, one mono- and one bi-specific antibody, for the treatment of acute myeloid leukemia (AML). A third lead compound, a bi-specific antibody directed against the tumor vasculature, is in the pre-clinical development and will be used for the treatment of solid tumors. Synimmune is co-developing with industrial and academic partners bispecific antibodies based on Synimmune's proprietary bispecific antibody platform.

Fields of action:

- Proteins/Peptides
- Therapeutics



SYNIMMUNE GmbH is a biotechnology company focusing on the development of optimized mono- and bispecific antibodies for improved immunotherapy of hematopoietic and solid malignancies.

The company was founded in 2010 as a spinoff of the Department of Immunology at the University of Tübingen.

Research activities at SYNIMMUNE focus on the development of third generation anti-tumor antibodies with further improved therapeutic activity. A common theme of the strategies pursued is the preservation of the selectivity of antibody effector functions, that is their dependency upon specific binding to an antigen. In SYNIMMUNE's view, this is best achieved by bispecific antibodies capable of inducing target cell-restricted activation of immune effector cells via receptors such as CD3 and CD28 on T cells, and CD16 on NK cells. The founders of



SYIMMUNE have pioneered this field from the mid-80ies and have contributed significantly to the development of recombinant antibody scaffolds that allow for the production of bispecific antibodies with improved stability and function.

SYNIMMUNE's goal is to enhance the therapeutic efficacy of antibody treatment by improving the selective activation of immune cells, and to bridge the "translational gap" between conception and clinical evaluation as fast as possible. To this end, SYNIMMUNE is establishing its own GMP-compliant production unit and works in close co-operation with the University Hospital in Tübingen. The development, GMP-compliant production and compassionate need application of optimized third generation antibodies has been performed within three years. This has been achieved within a project supported by the GO-Bio program of the BMBF. SYNIMMUNE has originated from this program and will maintain and foster its academic roots.







Synovo GmbH is a drug discovery company focussing on inflammatory and bone diseases. Synovo provides pharmacology and chemistry services for clients in the pharmaceutical and biotechnology industries.

Synovo's pharmacology services include efficacy studies in a range of models including those relevant to rheumatoid arthritis, osteoporosis, osteoarthritis and sepsis. These studies are often combined with pharmacokinetic and formulation studies to support the selection of optimal conditions and formulations.

In support of the pharmacology activities, Synovo provides synthetic chemistry services in the areas of analog synthesis, scale-up and formulation exploration. Synovo's team of chemists have a broad experience of medicinal chemistry and have completed a wide range of tasks from small parallel chemistry collections to specific elaboration of analog series. To maintain the quality of our synthetic products, we routinely employ preparative HPLC. This capacity can also be provided to third parties. Synovo's main goal in its service business is to provide fast data turn-around to early phase projects. Our experience is that rapid feedback to discovery chemistry is required in order to most efficiently and cost effectively prioritise leads before resources are expended on less promising areas. As a consequence, we routinely organise studies to meet tight time-lines and limited compound supplies.

Synovo's customers are drawn from throughout Europe, Australia, Canada and the US and include both small and large firms. We welcome enquiries and will always do our best to assist in any technical matter related to our business area.



Synovo GmbH

Paul-Ehrlich-Str. 15 D-72076 Tübingen Phone: +49 (0) 7071/96 43 25 Telefax: +49 (0) 7071/96 43 26 contact@synovo.com www.synovo.com

Contact person: Dr. Michael Burnet

Employees: 23

Production range/Services:

- Pharmacological testing of substances
- Models for bone diseases
- Models for inflammatory diseases
- Pharmacokinetics
- Synthetic chemistry
- Compound purification
- Compound formulation

- Analytics
- Biotechnological Services
- Cells/Cell Lines
- Contract Research
- Therapeutics

Reference BIOPRO Baden-Württemberg



TETEC AG

Aspenhaustr. 18 D-72770 Reutlingen Phone: +49 (0) 7121/514 87 60 Telefax: +49 (0) 7121/514 87 61 info@tetec-ag.de www.tetec-ag.com

Contact person: Dr. Klaus Maleck, MBA

Employees: approx. 50

Production range/Services:

- NOVOCART 3D
- NOVOCART Inject
- NOVOCART Basic
- Med tech

Fields of action:

- Cell/Cell Lines
- Tissue Engineering



TETEC AG: New chances through regenerative medicine

Using the body's own tissue, millions of patients will have the chance of successful treatment of cartilage damage, which cannot be properly addressed with today's medical approaches. TETEC develops innovative therapies for orthopedic indications with an expert team of scientists and specialists. TETEC was founded in Tübingen in the year 2000 with the goal to develop novel treatments for tissue repair. The company has today approx. 50 employees, bringing with them expertise in a wide range of disciplines such as cellular and material science, clinical and pharmaceutical development and regulatory affairs. TETEC is developing new procedures for the treatment of complex cartilage damages and diseases affecting the human skeletal and locomotion systems.

With NOVOCART[®] 3D and NOVOCART[®]

Inject, we set new benchmarks in the treatment of cartilage damages and with NOVOCART[®] Disc we are currently investigating how to best help patients with chronic back pain (painful disc) and herniated discs.

Our product portfolio also offers a cell-free material, NOVOCART[®] Basic, to be used mainly in smaller cartilage defects.

Affiliated with B. Braun/Aesculap, TETEC can provide an outstanding distribution network. We work actively to share our knowledge with the specialist MDs through professional user training and support with the ultimate goal to improve the quality of life of our patients.



Teva's Expertise in Biotechnology

Teva has a brand base in Germany, with innovative drugs, brand products, generics and over-the-counter medicines. With its diversified portfolio, Teva ranks third in the German retail market. In the German headquarters in Ulm and the site in Blaubeuren/ Weiler, Teva has state-of-the-art production facilities both for chemical products and for the production of biotechnological agents. Internationally Teva, whose company headquarters are in Israel, is among the 10 largest pharmaceutical concerns worldwide and is the world market leader among generics enterprises.

Product Pipeline

With ratiograstim and TevaGrastim, Teva developed the very first G-CSF biosimilar, which has been successfully placed in the German market for two years now. The same is true of Teva's own development Eporatio, a biotechnologically produced erythropoetin. With the company's own development Lipegfilgrastim, a long acting recombinant G-CSF, another biotechnologically produced preparation for supportive therapy is shortly expected to receive approval for release throughout the EU. Lipegfilgrastim will be used to treat cancer patients with neutropenia in order to stimulate the bone marrow to produce white blood cells to reduce the duration of severe neutropenia. When developing this product Teva used the new platform technology of GlykoPEGylierung[®]. In this two-stage enzymatic approach a 'sugar



bridge' is first attached to the amino acid threonine in position 134 of the Filgrastim molecule to which the polyethylene glycol (PEG) 'tail' can then be specifically attached.

Highly efficient multipurpose plant

At the Ulm site Teva has its own highly efficient multipurpose plant to manufacture biotech active ingredients from mammalian cell cultures. Teva controls the whole supply chain for Lipegfilgrastim, from production of the Filgrastim intermediate product XM21, the enzymes and reagents necessary for the pegylation reaction and the aseptic bottling of the drug. Certain enzymes and reagents, as well as the active agent itself, are produced directly in the company's own biotechnological multipurpose plant. The required testing and approval procedures also take place at Teva. The plant has also been approved by the FDA for the production of Lipegfilgrastim and has received authorization for this product to be supplied to the United States market.



TEVA GmbH

Graf-Arco-Str. 3 D-89079 Ulm Phone: +49 (0) 731/40 20 2 Telefax: +49 (0) 731/40 27 83 2 info.teva-deutschland@teva.de www.teva.de

Contact person:

Dr. Hermann Allgaier

Production range/Services:

Development and manufacture of biopharmaceuticals with emphasis on Biosimilars and Me-Better-Products, GlycoAdvance® and GlycoPegylation® platform technology for proteins with sophisticated characteristics

Fields of action:

• Therapeutics

See BIOPRO Baden-Württemberg 🗲



TherapySelect Dr. Frank Kischkel Carl-Bosch-Str. 4 D-69115 Heidelberg Phone: +49 (0) 6221/89 36 15 2 Telefax: +49 (0) 6221/89 36 15 3 info@therapyselect.de www.therapyselect.de

Contact person:

Dr. Frank Kischkel

Production range/Services:

- Diagnostic test for cancer patients
- Chemotherapy resistance assay (CTR-Test[®])
 (The CTR-Test[®] is a diagnostic tool to predict ineffectiveness of chemotherapies through in vitro testing of living tumor cells from individual patients.)
- ONCOMPASSTM
- Patient assistance services
- Pharma services

Fields of action:

• Diagnostics

TherapySelect Dr. Frank Kischkel is a biotech and medtech company located in Heidelberg, which belongs to the biotechnology cluster Rhine-Neckar (BioRN). TherapySelect's focus is the development, clinical validation, marketing and sales of diagnostic tests for cancer patients. So its field of activity is the personalized medicine (or personalized oncology). The company's aim is to increase patient's survival and quality of life as well as to reduce the costs in health care system.

TherapySelect has three main areas of activity. Firstly development and sales of own or licensed products, secondly distribution of other diagnostic tests, and thirdly offering its diagnostic platform(s) for pharma companies product development.

TherapySelect sales its own clinically well validated chemotherapy resistance assay (CTR-Test[®]) worldwide. The test is an in vitro chemoresistance assay on living tumor cells. The CTR-Test[®] has shown in various clinical trials to be greater than 95% accurate in predicting ineffectiveness of chemotherapies prior to administration of the drugs. Thus the CTR-Test[®] saves patients toxicity and enhances life quality. In addition the further development of the CTR-Test[®] technology as a platform for new products is supported by governmental grants. TherapySelect cooperates with KPS Diagnostics GmbH in order to offer patients molecular gene profiling of their tumors in combination with the data analysis. The service is called ONCOMPASS[™]. The intention is to know the therapeutic consequence resulting of the tumor gene profile. This cooperation gives information not only on the established targeted-drugs but also on the targeted-drugs in clinical development and whether they might be effective for the particular patient. As a service there is also the patient assistance service which helps to enter into a clinical trial, if wanted by patients or physicians.

Unsuccessful clinical trials are the most expensive obstacle in drug development. By combining diagnostic tools with the drug already during clinical trials, one increases the success of the clinical development and makes the drug more efficient if it is only administered to patients which have an increased susceptibility towards the drug. The CTR-Test[®] is such a diagnostic technology. With this test all drugs, which act directly onto the target cells, can be tested and assessed. TherapySelect offers the technology to pharma companies for all clinical trial phases worldwide.

CTR-Test[®]

Chemotherapie-Resistenz-Test As the ImmunoDiagnostic experts within Thermo Fisher Scientific, formerly known as Phadia with headquarters in Uppsala, Sweden, we develop, manufacture and market complete blood test systems to support the clinical diagnosis and monitoring of allergy, asthma and autoimmune diseases. For almost 40 years, we have been the global leader in allergy testing and have become one of the world's leading autoimmune disease test providers. Our 1,300 employees world-wide serve more than 3,000 laboratories in more than 60 countries.

The center of excellence in Freiburg, Germany, is the home of research, development, production and marketing of our autoimmunity tests.

Thermo Fisher Scientific - the leader in serving science - solves complex analytical issues, improves diagnostics and increases productivity. We enable our customers to make the world healthier, cleaner and safer.





Thermo Fisher

Thermo Fisher Scientific - Phadia GmbH Munzinger Str. 7 D-79111 Freiburg Phone: +49 (0) 761/4 78 05 0 Telefax: +49 (0) 761/4 78 05 120 autoimmunity@phadia.com www.thermoscientific.com/phadia

Contact person: Heiko von Bachmann

Employees: 1300

Production range/Services:

Blood test systems supporting the clincial diagnoses of allergies and autoimmune diseases

- Analytics
- Diagnostics
- Proteins/Peptides

BIOPRO Baden-Württemberg

TICEBA

TICEBA GmbH

Tissue & Cell Banking Im Neuenheimerfeld 517 D-69120 Heidelberg Phone: +49 (0) 6221/71 833 0 Telefax: +49 (0) 6221/71 833 29 info@ticeba.com www.ticeba.com

Contact person:

Dr Christoph Ganss, MD

Employees: 17

Branches:

Offices and laboratory at technology park Heidelberg

Production range/Services:

- Tissue & Cell Banking
- Discovery of the new ABCB5 glycoprotein by Professor Dr Markus Frank, which marks the pluripotent stem cells in the skin
- Global business activities

Fields of action:

- Biotechnological Services
- Cells/Cell Lines

About TICEBA

TICEBA is a highly innovative German life science company, working in the field of stem cell research and regenerative medicine.

Based upon its own research and exclusively licensed medical procedures, TICEBA practices the sampling, qualitative analysis, and longterm storage of adult stem cells taken from human skin. The process employs the latest international research findings and the highest international standards.

TICEBA is the first private tissue bank worldwide offering its clients the personal and individual cryogenic storage of their skin tissue and the stem cells contained therein – as a unique service for health prophylaxis on the highest level worth the expense and in accordance with the latest developments of science and technology.

TICEBA was founded by the physician and entrepreneur Dr Christoph Ganss, MD in the year 2003. The company started its business operations on 1 March 2005. TICEBA is located in the technology park in Heidelberg, Germany. The manufacturing license within the meaning of section 20b and section 20c was granted in January 2009.





TICEBA is the only company to dispose of a global patent for the evaluation of the quality of stem cells of the skin. Professor Dr Markus Frank, MD is scientific counselor to TICEBA. He is a scientist for basic research at the "Transplantation Research Center of Brigham and Women's Hospital and Children's Hospital Boston, Harvard Medical School". His focus in research is on adult stem cells of the skin, transplantation immunology as well as cancer research. He is the one who has discovered ABCB5 P-glycoproteins that play a key role with regard to adult stem cells of the skin and multidrug resistance. Professor Frank has been awarded several scientific prices and scholarships.





With more than 12 years of experience as full service supplier for the life science industry, we have a clear mission:

Accelerating your innovation and saving valuable research time & budget!

Our life science experts together with an outstanding collection of state-of-the-art laboratory equipment and technology allow us to always fulfill our clients' needs at highest quality standards and maximum pace.

As modular life science full service supplier we offer any research and development challenge in one-stop for our business partners.

With scientific professionals in each individual life science field Trenzyme combines and



customizes molecular biology, protein biochemistry and cell culture expertise for its clients. Trenzyme is a DIN EN ISO 9001:2008 certified company.

Our core competences are:

- Cell line development
- Protein expression and purification (E.coli, insect cells, yeast)
- Gene synthesis and custom cloning

Trenzyme is a privately owned German contract research organization offering highly individualized and modular services.

Founded in 2000, Trenzyme has steadily increased its customer base and enjoys long-term business relationships with regional and global life science players across all industries.



Trenzyme GmbH

Byk-Gulden-Str. 2 D-78467 Konstanz Phone: +49 (0) 7531/12 29 00 Telefax: +49 (0) 7531/12 29 01 1 contact@trenzyme.com www.trenzyme.com

Contact person: Dr. Reinhold Horlacher

Employees: 10

Production range/Services:

- From gene to cell line
- Cell culture innovation
- Cell line development
- Single cell cloning
- Protein expression
- Protein purification
- Highly customized services
- Gene synthesis
- Custom cloning

- Biotechnological Services
- Cells/Cell Lines
- Custom Production
- DNA/RNA
- Production Organisms
- Proteins/Peptides

Reference BIOPRO Baden-Württemberg

vario_nostic

bioanalytical services

varionostic GmbH

Söflinger Str. 100 D-89077 Ulm Phone: +49 (0) 731/36 08 07 56 Telefax: +49 (0) 731/36 08 07 54 info@varionostic.de www.varionostic.de

Contact person:

Uwe Gerstenmaier

Employees: 6

Production range/Services:

- DNA methylation assays (customized and predesigned/ ready-to-use)
- Epigenetics
- Pharmacogenetics
- Clinical genetics
- Pyrosequencing service
- Capillary sequencing service
- Realtime PCR service
- MassARRAY service (MALDI-TOF)
- Accreditation: DIN EN ISO/IEC
 17025:2005 (Genetic Diagnostics)

Fields of action:

- Analytics
- Biotechnological Services
- DNA/RNA



varionostic - the DNA Methylation Expert

varionostic is Europe's leading expert for DNA methylation analysis using newest platforms of Pyrosequencing and MassARRAY. We offer our customers from industry and academia outstanding tailored services from assay design to data analysis. Scientists can also profit from our predesigned methylation assays developed within our own research facilities. Our unique specialised competence is the basis for highest quality in epigenetic research and services to oncology, neurosciences, stem cell projects etc.

Additional services for epigenetic research include genotyping, allele quantification, short read sequencing and species identification. With our state-of-the-art lab (including Pyrosequencing, MassARRAY/MALDI-TOF, capillary sequencing and qPCR) we can detect all types of snips, polymorphisms and mutations. Besides human samples, the company also runs typing of BACs and other species.

Lab has an accreditation and is competent under the terms of DIN EN ISO/IEC 17025:2005 in the fields of genetic diagnostics.

DNA methylation and gene activity Quantitative DNA methylation analysis gives valuable information on the gene activity in the human genome under certain conditions. The methylation level of specific regions of the DNA is especially important for cancer research but also for neuroscience e.g. psychiatry and other academics.

warte not

varionostic, as THE methylation expert, gives you quantitative data on the methylation of the CpG regions and single CpGs you are interested in.

Research & Development

Together with partners from clinical research and industry, varionostic is performing its own epigenetic research. Our objective is to continuously improve our service, in particular by developing predesigned methylation assays.



in both academic and commercial RAD





Developing Active Anti-angiogenic Immunotherapies for Cancer Patients

VAXIMM is a company that is primarily focused on developing active immunotherapies (vaccines) for patients suffering from cancer. Our initial product candidate VXM01 is targeting the tumor vasculature, which is essential for tumors to grow beyond microscopic size. VXM01 has shown impressive anti-tumor activity in various animal studies testing different tumor types, different experimental setups, and different outcome measures. At the same time, the vaccine was remarkably well tolerated in these animals. Besides VXM01, VAXIMM has a pipeline of complementary candidate vaccines on the same platform. VXM06, targeting a prominent tumor-specific antigen, recently completed animal proof-of-concept.

VXM01 has started human clinical trials in December 2011. VXM01 has successfully completed a first-in-man safety and biomarker trial in pancreatic cancer patients, conducted at the University Hospital in Heidelberg.

For further information, please visit www.vaximm.com



VAXIMM GmbH

Julius-Hatry-Str. 1 D-68163 Mannheim Phone: +49 (0) 621/835 968 70 Telefax: +49 (0) 621/835 968 99 info@vaximm.com www.vaximm.com

Contact person: Dr. Heinz Lubenau

Employees: 6

Product range/Services:

- Development of active antiangiogenic immunotherapies for cancer patients
- Oncology
- Immunology
- R&D Therapeutics
- Preclinical

Fields of action:

• Therapeutics

🗮 BIOPRO Baden-Württemberg 🛩



Vetter Pharma International GmbH

Eywiesenstr. 5 D-88212 Ravensburg Phone: +49 (0) 751/37 00 0 Telefax: +49 (0) 751/37 00 40 00 info@vetter-pharma.com

Contact person:

Oskar Gold, Vice President KAM & Corporate Marketing

Branches:

Vetter Pharma International USA Inc. 4901 Searle Parkway, Suite 300A Skokie, IL 60077 Phone: +1 847 581 6888 Fax: +1 847 581 6880 infoUS@vetter-pharma.com

Employees: approx. 3000

Product range/Services:

- Vetter Development Service
- Vetter Commercial Manufacturing
- Vetter Packaging Solutions

Fields of action:

Custom Production

Meet Vetter

Vetter is a leading contract development and manufacturing organization (CDMO) that specializes in the aseptic filling of syringes, cartridges and vials. The company has extensive experience with biologics and other complex compounds, including monoclonal antibodies, peptides, interferons and vaccines. Collaborating with pharma/ biotech clients worldwide, Vetter supports products from preclinical development through global market supply. Through its U.S. and European facilities, Vetter Development Service provides state-of-the-art support for early-stage products, with seamless transfer at Phase III to Vetter Commercial Manufacturing for large-scale production. The company offers state-of-the-art technology and innovative processes to promote product quality and maximize API yield.

Vetter Development Service

At Vetter Development Service, we partner with our clients from preclinical development through Phase III, featuring:

- Formulation support
- Process development
- Clinical trial manufacturing
- Analytical service
- Regulatory support





Vetter Commercial Manufacturing

Vetter Commercial Manufacturing provides Phase III manufacturing through global market supply, featuring:

- Fill and finish
- · Analytical service
- Regulatory support
- Product life cycle management

Vetter Packaging Solutions

Vetter Packaging Solutions helps our clients match their product with the appropriate drug-delivery system (primary packaging); secondary packaging, and packaging services, featuring:

- Customized packaging development
- · Specialized technologies
- Proven platform technologies
- Packaging services
- · Logistic services

Dosage Forms

Syringes, cartridges, vials

Viscofan BioEngineering

Viscofan BioEngineering is a business unit of Viscofan S.A., the worldwide leader in the manufacture of collagen, cellulose, fibers and plastic products for the food industry. The company has facilities in Europe, America and Asia, and sells its products in more than 160 countries all over the world. It is listed on the Spanish Stock Market. Viscofan BioEngineering focuses its activities on the development of innovative biomaterials on the basis of collagen for application in cell culture, tissue engineering and regenerative medicine.

Their latest development is the Collagen Insert, which contains a self supporting and semi-permeable collagen membrane. The Insert is suited for air lift cell cultivation.

Besides the further development of its innovative collagen scaffolds, Viscofan BioEngineering has entered into collaborations with several



academic groups in Germany, Spain and the US to research and develop the use of these biomaterials as cell-based assays and as cell-seeded implants in selected medical indications, in the field of e.g. heart disease or age-related macular degeneration (AMD).

The company has offices and laboratories in Weinheim (Germany) as part of Naturin Viscofan GmbH, the German subsidiary of Viscofan S.A. and collagen centre of excellence for the whole group.



Viscofan BioEngineering a Business Unit of Naturin Viscofan GmbH Badeniastr. 13 D-69469 Weinheim Phone: +49 (0) 6201/8 63 58 Telefax: +49 (0) 6201/8 62 26 sales@bio.viscofan.com

Contact person:

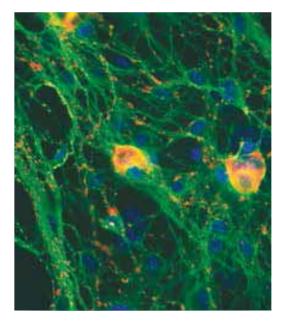
Petra Görg

Employees: 5

Product range/Services:

- Collagen cell carrier
- Collagen inserts
- Regenerative Medicine

- Supplier
- Tissue Engineering





BIOPRO Baden-Württemberg



VIVACELL Biotechnology GmbH Ferdinand-Porsche-Str. 5 D-79211 Denzlingen Phone: +49 (0) 7666/90 28 77

Telefax: +49 (0) 7666/90 28 78 info@vivacell.de www.vivacell.de

Contact persons:

Dr. Kurt Appel Dr. Bernd Fiebich

Branches:

VIVACELL ESPANA (E)

Employees: 6

Production range/Services:

- Immunmodulation / inflammation
- CNS
- Dermatology / cosmetics
- Allergy
- Oral care
- Oncology / angiogenesis
- ADME
- Toxicity
- Pharma
- Phytopharmaceuticals
- Nutraceuticals
- Pharmacology

Fields of action:

- Agriculture/Food
- Analytics
- Cells/Cell Lines
- Contract Research

Vivacell Biotechnology GmbH is a privately owned contract-based research organisation (CRO) that provides specialised in vitro and in vivo models for testing and developing pharmaceutical and phytopharmaceutical compounds, extracts and nutraceuticals. VivaCell Biotechnology GmbH was founded in 1999 as a spin-off of the University of Freiburg Medical School. In 2003, Vivacell moved to his own facility in Denzlingen. VivaCell's preclinical services include standard protocols and protocols adapted to the needs of the customers using a variety of *in vitro* and *in vivo* systems. VivaCell is combining highly qualified cellular and molecular biology knowledge and expertise in various fields with a focus on immunology and neurobiology. At VivaCell, we offer complete research projects from basic R&D up to pre-clinical research (GLP) in one hand. Our clients do not have to gather the research data from various CROs.

Immunmodulation and inflammation

Proliferation/activation of T-/B-lymphozytes, phagocytic activity, coagulation assays. Primary human monocytes, T-/B-lymphozytes, fibroblasts, keratinocytes, melanocytes, endothelial cells, colon epithelial cells, and tumor cell lines (parameters e.g prostaglandins, cytokines). *In vivo* models (IBD, CIA etc.).

CNS studies in vitro and in vivo

Microglia/astrocytes/neurons, cell lines (parameters e.g. prostaglandins, cytokines, NO). Organotypic hippocampal slice cultures, Neurotoxicity and neuorprotection, Neurotransmitters and receptors. In vivo disease models for: stroke, Parkinson's disease, epilepsy, Huntington's disease, migraine, peripheral neuropathy, pain, anxiety, depression, schizophrenia, etc.



Dermatology / cosmetics

Fibroblast and keratinocyte proliferation and migration, Anti-inflammatory activity, Anti-oxidant capacity, UVB induced ROS, PPAR α , PPAR δ and PPAR γ , collagen, metalloproteinases, Dermal papilla cells, growth fractors, Hair (5alpha-reductase I and II, dermal papilla cells, growth factors (IGF, KGF, PDGF, TGF etc.) TERT activity.

Oncology / angiogenesis

Proliferation inhibition assays (human tumor cell lines), clonogenic assays (human tumor xenografts, human tumor cell lines, and hematopoetic stem cells). Subcutaneous models, orthotopic models with human xenografts, and murine tumor models. 3D *in vitro* angiogenesis assay.

Allergy

Histamine release, histamine induced inflammation, mast cell stabilization.

Oral care

Gingival inflammation (cytokines, prostaglandins, MMPs, NF-kappaB), Proliferation of gingival fibroblasts, Gingival tissues, Determination of inflammatory parameters in sulkus samples

ADME

Gastrointestinal absorption, blood-brain barrier, dermal systems, PgP, metabolism

Toxicity

Cytotoxicity, genotoxicity, irritation, sensitization, etc.



<u>10 μm</u>

WITec is a manufacturer of high resolution optical and scanning probe microscopy solutions for scientific and industrial applications. A modular product line allows the combination of different microscopy techniques such as Raman, NSOM, or AFM in one instrument. Focusing on innovations and constantly introducing new technologies, WITec is the leading expert for a wide variety of optical, structural, and chemical imaging tasks. Areas of application for WITec's Imaging systems include life science, biomedical research, polymer sciences, pharmaceutics, geoscience, and nanotechnology.

For high resolution chemical imaging the WITec Confocal Raman Microscope alpha300 R provides the ability to perform in-situ Raman imaging at a lateral resolution down to 200 nm. Confocal Raman Microscopy allows imaging of the chemical properties of a sample nondestructively while requiring no staining and only minimal sample preparation if any. Automated measurements on large samples can be easily accomplished with the WITec alpha500 automated Confocal Raman & Atomic Force Microscope. Images with an optical resolution beyond the diffraction limit can be easily obtained with the Scanning Near-field Optical Microscope alpha300 S also featuring AFM and confocal microscopy capabilities. The award winning TrueSurface Imaging mode allows confocal Raman imaging guided by surface topography. TrueSurface Microscopy follows the surface topography with high precision, so that even rough or inclined samples always stay in focus while performing confocal Raman imaging.





WITec GmbH

Lise-Meitner-Str. 6 D-89081 Ulm Phone: +49 (0) 731/1 40 70 0 Telefax: +49 (0) 731/1 40 70 200 info@witec.de www.witec.de

Contact person: Harald Fischer (harald.fischer@witec.de)

Branches: USA, Singapore

Employees: 40 (Germany)

Production range/Services:

- High-resolution optical and scanning probe microscopes
- Confocal Raman microscopes
- Atomic Force microscopes
- Scanning near-field optical microscopes

- Analytics
- Supplier

Reference BIOPRO Baden-Württemberg

ZUBLIN

Züblin Umwelttechnik GmbH Otto-Dürr-Str. 13 D-70435 Stuttgart Phone: +49 (0) 711/82 02-0 Telefax: +49 (0) 711/82 02-154 umwelttechnik@zueblin.de

Contact person:

Dr. Hans-Georg Edel

Employees: 125

Branches: Stuttgart, Berlin, Chemnitz, Dortmund, Hamburg, Nuremberg, Strasbourg, Milan, Cracow

Product range/Services:

- Environmental remediation
- Biofilm reactors
- Biological waste air purification
- Biological soil decontamination
- BioAirlift
- Biosparging
- Biological biogas desulphurisation

Fields of action:

• Environmental Biotech





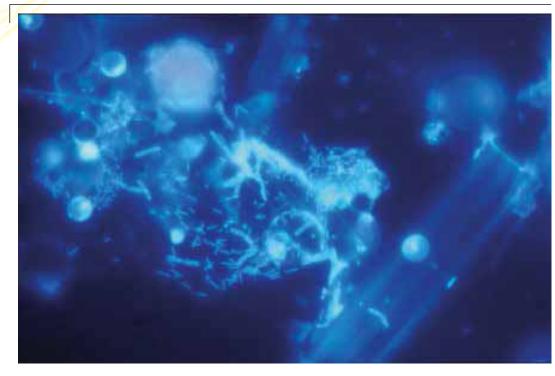
Specialist of environmental technology

ZÜBLIN Umwelttechnik is a leading, internationally oriented environmental engineering company with more than 20 years of experience in the remediation of contaminated sites and the cleanup of groundwater, soil and air.

The objective of ZÜBLIN Environmental Biotechnology is to promote the growth of the existing microflora in a natural way. Backed by our extensive know-how and experience in this field, we employ appropriate methods to stimulate and accelerate degradation processes that would otherwise only occur at a slow pace. We can therefore ensure that the removal of pollutants from water, soil or air takes place in a manner that is friendly to the environment and to your budget.

We establish a balance between the demands of economic progress and the need to preserve a natural, congenial environment for future generations. ZÜBLIN Umwelttechnik offers environmental technology for human beings.





Microbial contamination under fluorescence microscope

Zwisler Laboratorium GmbH is a privately owned service laboratory located in Konstanz, Germany, founded in 2003.

Zwisler Laboratorium GmbH is ISO 17025 accredited and is GLP- and GMP-certified.

The Lab is focused on microbiological and cell culture methods to demonstrate the high quality production process of our customers. We are a partner to achieve highest quality standards.

A main focus - with worldwide customers - is the Invitro Pyrogen Testing (MAT, EP 2.6.30) of Pharmaceuticals and Medical Devices.

Another main Field of Action are Integrity Tests for Pharmaceutical and Cosmetic Packaging (Microbial Ingress Tests).



Invitro Pyrogen Test (human blood) with Medical Device



Cell culture under the microscope (Cytotox-Test)



Zwisler Laboratorium GmbH

Blarerstr. 56 D-78462 Konstanz Phone: +49 (0) 7531/99 11 00 Telefax: +49 (0) 7531/99 11 01 info@zwisler-lab.com www.zwisler-laboratorium.com

Contact person:

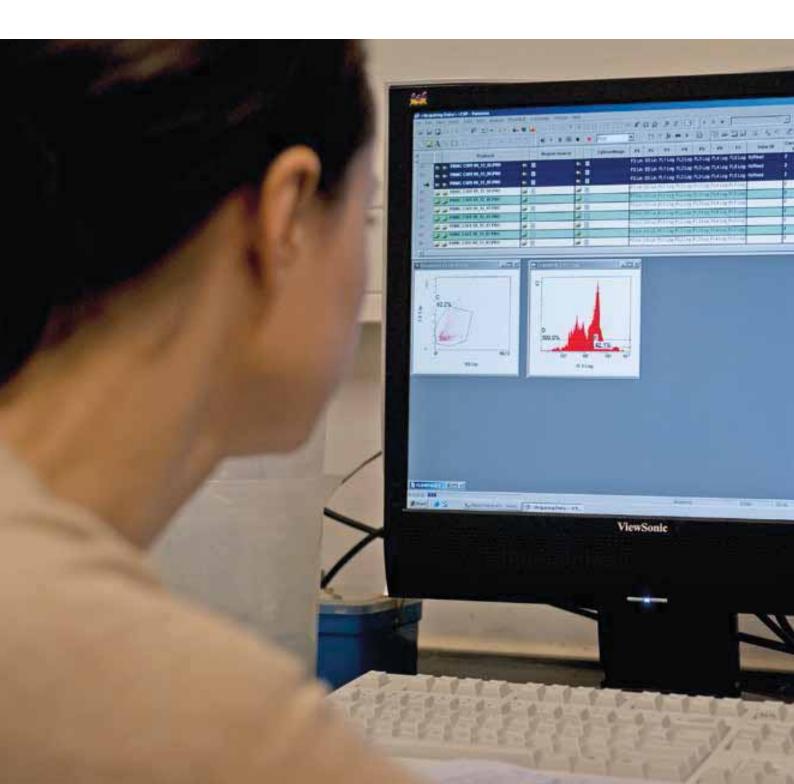
Dr. Walter Zwisler

Production range/Services:

- Quality Control
- Invitro Pyrogen Testing (MAT)
- Endotoxin Test (LAL)
- Integrity Tests
- (Microbial Ingress Test)
- Cytotoxicity Test for Medical Devices
- Reprocessing Validation for Medical Devices
- Bioburden Test
- Development of customerrelated Tests
- Microbiology Customers
- Medical Device Manufacturer
- Packaging and Pharmaceutical Industry
- Mainly from Europe and USA

Fields of action:

- Analytics
- Biotechnological Services
- Cells/Cell Lines



Biotech Company Overview





Page	Company	City
00		
29	4base lab GmbH	Reutlingen
30	ACROVIS® biostructures GmbH	Dornstadt
31	Affimed Therapeutics AG	Heidelberg
32	Agilent Technologies Sales & Services GmbH & Co. KG	Waldbronn
33	Agrano GmbH & Co. KG	Riegel am Kaiserstuhl
34	Aldevron Freiburg GmbH	Freiburg
35	Anoxymer GmbH	Esslingen
36	Apara Bioscience GmbH	Denzlingen
37	Ascendis Pharma GmbH	Heidelberg
38	ATG:biosynthetics GmbH	Merzhausen
39	Atoll GmbH	Weingarten
7	Baden-Württemberg International Agency for International Economic and Scientific Cooperation	Stuttgart
40	BERTHOLD TECHNOLOGIES GmbH & Co. KG	Bad Wildbad
41	Biametrics GmbH	Tübingen
42	Bioassay-Labor für biologische Analytik GmbH	Heidelberg
43	BioCat GmbH	Heidelberg
44	BioChem GmbH	Karlsruhe
45	biomers.net GmbH	Ulm
46	BIOMEVA GmbH	Heidelberg
47	BIOPHARM GmbH	Heidelberg
6	BIOPRO Baden-Württemberg GmbH	Stuttgart
8/9	BioRegion Freiburg c/o Technology Foundation BioMed Freiburg	Freiburg
10/11	BioRN Network e.V.	Heidelberg
12/13	BioLAGO	Konstanz
14/15	BioRegio STERN Management GmbH	Stuttgart
16/17	BioRegion Ulm e. V.	Ulm
48	BioRépair GmbH	Sinsheim
49	biosyn Arzneimittel GmbH	Fellbach
17	BiotechnologieZentrum Ulm	Ulm
9	BioTechPark Freiburg	Freiburg

Page	Company	City
50	BioTeSys GmbH	Esslingen
51	BioTissue Technologies GmbH	Freiburg
52	BMG LABTECH GmbH	Ortenberg
53	Boehringer Ingelheim Biopharmaceuticals GmbH	Ingelheim
54	CANDOR Bioscience GmbH	Wangen
55	cecolabs UG	Tübingen
56	CeGaT GmbH	Tübingen
57	Cellca GmbH	Laupheim
58	Cellendes GmbH	Reutlingen
59	CellGenix GmbH	Freiburg
60	Cellzome GmbH	Heidelberg
61	CETICS Healthcare Technologies GmbH	Esslingen a. N.
62	ChemCon GmbH	Freiburg
63	Comprehensive Biomarker Center GmbH	Heidelberg
64	Computomics GmbH & Co. KG	Tübingen
65	Crinotec GmbH	Tübingen
66	Curetis AG	Holzgerlingen
67	CureVac GmbH	Tübingen
68	Cytonet GmbH & Co. KG	Weinheim
69	da-cons GmbH data analysis & consulting	Eggenstein-Leopoldshafen
0	DIARECT AG	Freiburg
71	DSM Nutritional Products GmbH Grenzach	Grenzach-Wyhlen
72	EMC microcollections GmbH	Tübingen
73	ExploSYS GmbH	Leinfelden-Echterdingen
74	FRUTAROM Savory Solutions GmbH	Stuttgart
'5	GATC Biotech AG	Konstanz
6	Genaxxon bioscience GmbH	Ulm
7	Gene Bridges GmbH	Heidelberg
78	Genotype GmbH	Wilhelmsfeld
79	Glycotope Biotechnology GmbH	Heidelberg
30	Graffinity Pharmaceuticals GmbH	Heidelberg

Page	Company	City
81	greenovation Biotech GmbH	Heilbronn
82	Greiner Bio-One GmbH	Frickenhausen
83	Hain Lifescience GmbH	Nehren
84	HB Technologies AG	Tübingen
85	Heidelberg Pharma AG	Ladenburg
86	HiSS Diagnostics GmbH	Freiburg
87	Hydrotox GmbH	Freiburg
88	IBAM GbR Dr. Rainer Knörle & Dr. Peter Schnierle	Denzlingen
89	ibt- Immunological and Biochemical Testsystems GmbH	Binzwangen
90	immatics biotechnologies GmbH	Tübingen
91	Insilico Biotechnology AG	Stuttgart
92	Jobst Technologies GmbH	Freiburg
93	Junker Filter GmbH	Sinsheim
94	LABOR DR. MERK & KOLLEGEN GmbH	Ochsenhausen
95	Labor für DNA-Analytik	Freiburg
96	Logopharm GmbH	March-Buchheim
97	Mediagnost GmbH	Reutlingen
98	MEDICHEM Diagnostica GmbH & Co. KG	Steinenbronn
99	Medicyte GmbH	Heidelberg
100	menal GmbH Gesellschaft für medizinisch naturwissenschaftliche Laboranalytik	Emmendingen
101	MetaSystems GmbH	Altlussheim
102	micro-biolytics GmbH	Esslingen
103	MicroMol GmbH + FPQS	Karlsruhe
104	Multi Channel Systems MCS GmbH	Reutlingen
105	nadicom Gesellschaft für angewandte Mikrobiologie mbH	Karlsruhe
106	nanoTools Antikörpertechnik GmbH & Co. KG	Teningen
107	npi electronic GmbH	Tamm
108	n-bio GmbH	Konstanz
109	Oncotest GmbH	Freiburg
110	PANATecs GmbH	Heilbronn
111	PEPperPRINT GmbH	Heidelberg

Page	Company		City	
112	Peptide Specialty Laboratories GmbH		Heid	elberg
113	PromoCell GmbH		Heid	elberg
114	ProQinase GmbH		Freib	burg
115	Q-bios GmbH		Man	nheim
116	ravo Diagnostika GmbH		Freib	burg
117	rent-a-lab Dr. Carsten Tober		Reut	lingen
118	Rentschler Biotechnologie GmbH		Laup	heim
119	RHEACELL GmbH & Co. KG		Heid	elberg
120	Roche Diagnostics GmbH Roche Diagnostics Deutschland GmbH		Man	nheim
121	Sciomics GmbH		Heid	elberg
122	SEARCH-LC GmbH		Heid	elberg
123	Sensovation AG		Rado	olfzell
124	SGS M-Scan GmbH		Freib	purg
125	Subitec GmbH		Stutt	gart
126	SYGNIS Pharma AG		Heid	elberg
127	SYMBIOSIS		Eppe	elheim
128	SYNIMMUNE GmbH		Tübir	ıgen
129	Synovo GmbH		Tübir	ıgen
11	Technologiepark Heidelberg GmbH		Heid	elberg
17	TFU – TechnologieFörderungsUnternheme BiotechnologieZentrum Ulm	ən GmbH	Ulm	
130	TETEC AG		Reut	lingen
131	TEVA GmbH		Ulm	
132	TherapySelect Dr. Frank Kischkel		Heid	elberg
133	Thermo Fisher Scientific - Phadia GmbH		Freib	burg
134	TICEBA GmbH		Heid	elberg
135	Trenzyme GmbH		Kons	stanz
17	TTR Technologieparks Tübingen-Reutlinge	en GmbH	Reut	lingen
136	varionostic GmbH		Ulm	
137	VAXIMM GmbH		Man	nheim

Page	Company	City
138	Vetter Pharma International GmbH	Ravensburg
139	Viscofan BioEngineering a Business Unit of Naturin Viscofan GmbH	Weinheim
140	VIVACELL Biotechnology GmbH	Denzlingen
141	WITec GmbH	Ulm
142	Züblin Umwelttechnik GmbH	Stuttgart
143	Zwisler Laboratorium GmbH	Konstanz

Notes

Imprint

// Publisher

BIOPRO Baden-Württemberg GmbH Breitscheidstraße 10 | 70174 Stuttgart/Germany

// Editorial Management

Introduction and company database BIOPRO Baden-Württemberg GmbH

// Design & Photos

BIOPRO Baden-Württemberg GmbH

// Production

Designwerk Kussmaul

© 2013, BIOPRO Baden-Württemberg GmbH

BIOPRO Baden-Württemberg GmbH Breitscheidstraße 10 | 70174 Stuttgart/Germany Phone +49 (0) 711/21 81 85-00 | Fax +49 (0) 711/21 81 85-02 E-Mail: info@bio-pro.de | www.bio-pro.de

www.bio-pro.de





BIOPRO Baden-Württemberg GmbH · Breitscheidstr. 10 · 70174 Stuttgart/Germany Phone: +49 (0) 711-21 81 85 00 · Fax: +49 (0) 711-21 81 85 02 · E-Mail: info@bio-pro.de