

## PRESS RELEASE

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### **Boehringer Ingelheim licenses ProBioGen's novel GlymaxX<sup>®</sup> technology**

Ingelheim and Berlin, Germany, August 10<sup>th</sup>, 2011 - Boehringer Ingelheim and ProBioGen AG announced today that they have signed a non-exclusive Licensing Agreement regarding ProBioGen's GlymaxX<sup>®</sup> technology. Boehringer Ingelheim's Contract Manufacturing Business will apply the technology to enhance ADCC (Antibody-Dependent Cell-Mediated Cytotoxicity) activity of antibodies.

The GlymaxX<sup>®</sup> technology for production of afucosylated proteins is universally applicable, simple and potent. As a unique feature, differentiating it from other approaches, the GlymaxX<sup>®</sup> technology can also be applied to already existing antibody producer cell lines without altering their productivity. The technology can easily be integrated into Boehringer Ingelheim's high expression CHO-based BI-HEX<sup>®</sup> system.

Both Parties agreed to jointly market the technology and to offer it to customers royalty free.

"We are very pleased that Boehringer Ingelheim has decided to integrate our GlymaxX<sup>®</sup> technology into their technology portfolio for customer and in-house projects. This is an additional milestone in our long-standing business relationship," commented Volker Sandig, Chief Scientific Officer of ProBioGen AG. Wieland Wolf, ProBioGen's Chief Executive Officer, added, "The GlymaxX<sup>®</sup> technology is another demonstration of ProBioGen's core expertise, understanding animal cell biology and converting this knowledge into pioneering solutions in process development and product design."

"With the combination of the BI-HEX<sup>®</sup> platform and ProBioGen's GlymaxX<sup>®</sup> technology we can offer our customers tailored solutions for high titer expression of highly potent antibodies", said Simon Sturge, Corporate Senior Vice President Biopharmaceuticals of Boehringer Ingelheim. "This is another step to continuously invest in our technology leadership and to provide flexible solutions, addressing our customer's needs."

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## ADCC

ADCC (Antibody-Dependent Cell-Mediated Cytotoxicity) activity is an important antibody function leading to selectively killing target cells, i.e. cancer cells or pathogen-infected cells. Several therapeutic antibody drugs on the market rely on ADCC as a mechanism of action. ADCC enhancement has the potential to increase the therapeutic effect and/or to greatly reduce antibody dosage requirements, resulting in fewer side-effects and treatment costs.

## About GlymaxX<sup>®</sup>

The GlymaxX<sup>®</sup> technology, developed by ProBioGen prevents the addition of the sugar “fucose” to the N-linked antibody carbohydrate part by antibody producing cells. The absence of fucose enhances ADCC. The GlymaxX<sup>®</sup> technology is based on the introduction of a gene for an enzyme which deflects the cellular pathway of fucose biosynthesis. The GlymaxX<sup>®</sup> technology is universally applicable, simple and potent, and can be rapidly applied to any existing antibody producer cell line, or can be included into any new cell line development. ProBioGen offers this technology royalty-free to third parties. [www.glymaxx.com](http://www.glymaxx.com)

## About ProBioGen - [www.probiogen.de](http://www.probiogen.de)

ProBioGen is an internationally operating Contract Development and Manufacturing Organization (CDMO) with almost 20 years of experience in mammalian cell culture, process development and GMP-manufacturing. ProBioGen, with its scientific excellence and strong intellectual property base, is a competent and reliable CDMO partner offering customized solutions for even the most challenging development and manufacturing requirements. This is backed by ProBioGen’s established CHO cell and media platform, and its AGE1<sup>®</sup> family of animal and human designer cell lines. All services and technologies are embedded in a total quality management system to assure compliance with international ISO and GMP standards (EMA/FDA).

ProBioGen was founded in 1994 and is located in Berlin, Germany.

## About Boehringer Ingelheim - [www.biopharma-cmo.com](http://www.biopharma-cmo.com)

The Boehringer Ingelheim group is one of the world’s 20 leading pharmaceutical companies. Headquartered in Ingelheim, Germany, it operates globally with 145 affiliates in 50 countries and more than 42,000 employees. Since it was founded in 1885, the family-owned company has been committed for 125 years to researching, developing, manufacturing and marketing novel products of high therapeutic value for human and veterinary medicine.

Today, Boehringer Ingelheim is one of the world’s leading companies for contract development and manufacture of biopharmaceuticals. 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 pre-clinical development up to global market supply with a strong commitment to its customers at its global manufacturing facilities for mammalian cell culture and microbial fermentation. Boehringer Ingelheim has brought 19 molecules to market and 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 products.

**Contact:**

*Heidrun Thoma  
Corporate Communications  
Boehringer Ingelheim GmbH  
55216 Ingelheim/Germany  
Phone: +49/6132 77 3966  
[Heidrun.Thoma@boehringer-ingelheim.com](mailto:Heidrun.Thoma@boehringer-ingelheim.com)  
Twitter: [www.twitter.com/boehringer](http://www.twitter.com/boehringer)*

*Dr. Gabriele Schneider  
Vice President Business Development  
ProBioGen AG  
13086 Berlin/Germany  
Phone: +49 (0)30 924 006-0  
email: [cmo@probiogen.de](mailto:cmo@probiogen.de)*

**More information:**

[www.probiogen.de](http://www.probiogen.de)

[www.glymaxx.com](http://www.glymaxx.com)

[www.biopharma-cmo.com](http://www.biopharma-cmo.com)

[bio-cmo@boehringer-ingelheim.com](mailto:bio-cmo@boehringer-ingelheim.com)