



# The Carriers to Success . . .



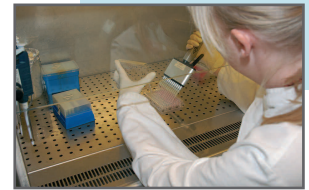
## Heavy with competence

The **tgcBIOMICS** was founded by the two internationally renowned microbiologists Prof Dr Christoph von Eichel-Streiber and Prof Dr Trinad Chakraborty in 1999. The founding concept was based on a patent filed in 1997 by both scientists which describes the **tgc** method enabling targeted induction of somatic transgenic cells with the help of bacteria. Business operations started in October 2000. The recent move to offices and laboratories at BioPark Mainz provides excellent conditions for a continued dynamic growth. At the biopark **tgcBIOMICS** has all approvals under the German Infection Protection Act (Infektionsschutzgesetz) and Genetic Engineering Act (Gentechnikgesetz). The location close to numerous scientific facilities, pharmaceutical manufacturers and Frankfurt being the financial hub of Europe add to the attractiveness of the site. Excellently trained employees and innovative ideas are within easy reach in this environment.



## A team with know-how

Achieving customer satisfaction is a priority. This is ensured by the service orientation of **tgcBIOMICS**, the state-of-the-art equipment of the laboratories and the friendly atmosphere at the company. The team of committed bioscientists is experienced within the target markets and possesses a comprehensive medical competence. Employees perform at a high quality standard, concentrate on customer needs and provide information about the project's progress on a continuous basis. Satisfied customers are a characteristic for **BIOMICS** made in Germany.



## tgcBIOMICS: what's in a name

The method of *targeted genetic conditioning* enables immediate use of information from the analysis of genes and proteins and thereby allows access to targeted genetic conditioning of animal cells themselves. The **tgc** technology utilizes special **tgc**-bacteria produced exactly for this application featuring a set of specific characteristics. They contain the target DNA under eucaryotic control on a plasmid and transfer the intended genetic information to eucaryotic cells. There the nucleic acids have an effect either by themselves or via production of coded recombinant proteins. So-called Bacterial Gene Carriers allow access to targeted genetic conditioning of cells, tissues or organs in culture, organs in the animal or of a complete organism. The **tgc**-bacteria are destroyed after transfection. Their own DNA will not be detectable later on, thereby excluding a potential pathogenic hazard.



## Building bridges by intelligence

With the development of the platform technology of Bacterial Gene Carriers **tgcBIOMICS** has an excellent access to in vivo production of recombinant proteins which is extremely beneficial for the client. The smart technology of bacterial

gene carriers forms an effective bridge from GENOMICS to the future market of **BIOMICS**. In a one-step-procedure high quality cells can be generated which are producing the pharmaceutical active compound within a short time and in economically relevant amounts. As a next step in development heterologous proteins are anchored to the cell wall of **tgc**-bacteria. Using different anchoring sequences both orientations of the proteins become possible. Such immobilized proteins may be used in the field of diagnostics, as innovative vaccines, recombinant antibodies, as biocatalysts and for several other applications.

These innovative technologies open up new opportunities for the use of recombinant proteins. Ambitious scientists are working continuously on the research and establishment of these various capabilities.



## Together on target

As a successful biotechnological company in Rheinland-Pfalz **tgcBIOMICS** offers extensive services for the pharmaceutical industry. Customers appreciate the friendly atmosphere, the orientation towards results and the reliable performance regarding services. Starting with contract cloning all recombinant DNA/RNA techniques are on offer. Beyond cultivation and economical optimization of cell lines and bacteria there are services "all around the protein". The main focus lies on development, improvement and production of tailor-made proteins for analytics in the clinical laboratory. Further services include the area of DNA vaccination and gene therapy.

For suppliers of diagnostics the ready-to-use diagnostic kits and the development of custom-made diagnostical markers for new assays are of particular interest in addition to the production of antibodies and specific antigens.

With the platform technologies of Bacterial Gene Carriers for transferring DNA to eucaryotic host cells, the surface-display

of **tgc**-bacteria for diagnostics, vaccine production and immobilization of enzymes and **tgc**-bacteria as innovative gram positive expression system the company possesses a unique potential for the practical application of modern molecular biology. To exploit the complete or modular utilization of these possibilities to the highest extent **tgcBIOMICS** provides customers with instructions and training if necessary. The company is able to respond to most diverse customer needs due to its autonomy and independence.



## On track to future success

**tgcBIOMICS** strives for utilizing its unique know-how of the **tgc** technology to achieve a worldwide leading position in the commercialisation of Bacterial Gene Carriers for the transfer of nucleic acids in order to control biological processes. Marketing of Bacterial Gene Carriers will be achieved by outlicensing of the **tgc** technology, by strategic cooperations with pharma- or biotech-companies and by the establishment of custom-made production cell lines. For these purposes **tgcBIOMICS** is actively searching partnerships with leading innovative companies in the area of pharma and biotechnology.

In particular proteins which are difficult to express will become interesting as active ingredients when they can be produced for the first time on a commercially acceptable basis due to the utilization of the **tgc** technology. They are promising candidates for licensing and development at **tgcBIOMICS** up to clinical tests.

**TgcBIOMICS** provides the basis for further and new developments using the proprietary **tgc** technology. In this context the in-vivo application of Bacterial Gene Carriers shall be developed for the market via outlicensing and cooperations with other companies.



# tgcBIOMICS

The gene carrier company

**tgcBIOMICS GmbH**

Carl-Zeiss-Strasse 51

D-55129 Mainz

Phone: + 49 (0) 6131 62757 - 15

Fax: + 49 (0) 6131 62757 - 18

Mobile: + 49 (0) 1520 9464194

E-mail: [info@tgcBIOMICS.de](mailto:info@tgcBIOMICS.de)

Web: [www.tgcBIOMICS.de](http://www.tgcBIOMICS.de)