

Polyplus-transfection announces the development of "ZNA™", a new class of modified oligonucleotides

ZNA™, new molecular biology tools for research and diagnostics extend Polyplus offering, and will be presented at the Advances in qPCR conference in Stockholm, September 17-18

Strasbourg, September 15, 2008 – Polyplus-transfection, a company specialized in the research, development and marketing of innovative reagents for transfection and RNA interference (RNAi), announces today that it has developed a new class of cationic oligonucleotides. These are called "ZNA $^{\text{TM}}$ " and have a promising potential in molecular biology. Polyplus owns the intellectual property.

Polyplus has recently established proof of concept showing that ZNA^{TM} used as detection probes improve PCR technology performance. In particular, ZNA^{TM} increase the sensitivity of tests and the ability to detect mutations. As well as presenting a similar efficacy to the best modified oligonucleotides on the market, ZNA^{TM} possess major advantages compared to competing products. They are easy to design and will cost less to produce.

 $\mathsf{ZNA}^{\mathsf{TM}}$ offer an increased affinity for nucleic acids without losing selectivity and therefore will improve the performance of other molecular hybridisation techniques such as *in situ* hybridisation and microarrays. They could also be used for *in vitro* detection of micro-RNAs, a new class of intracellular effectors. This means that $\mathsf{ZNA}^{\mathsf{TM}}$ are likely to become powerful and reliable tools in research and diagnostics.

"Polyplus is extending its activities from transfection reagents to molecular biology tools for research and diagnostics," said Joëlle Bloch, CEO of Polyplus-transfection. "Our next step will be to market ZNA^{TM} via a network of firms specialized in this field. We are also actively seeking partners to help us develop a range of applications for ZNA^{TM} ."

Polyplus-transfection will present its first results in a talk entitled "ZNA™: New High-Affinity Synthetic Oligonucleotides as Powerful Tools for PCR″ at the international Advances in qPCR conference taking place in Stockholm Sweden, September 17-18 2008.

About "ZNA™"

 ZNA^{TM} are oligocation-oligonucleotide conjugates which have an increased affinity for their complementary sequence without losing selectivity. This affinity increase is due to the oligocationic part which reduces the charge repulsion between the two strands of nucleic acid. Because of the non-directive nature of electrostatic interactions, this affinity gain is independent of the base sequence and is therefore predictable, thus making the design of ZNA^{TM} extremely easy.

 ZNA^{TM} are made with a standard oligonucleotide synthesizer allowing fast, cost-effective production as well as the ability to add other modifications such as fluorescent markers.

About Polyplus-transfection

Polyplus-transfection is focused on developing innovative solutions for delivery of biomolecules. The company has been marketing its transfection reagents worldwide since 2001 and is reinvesting most of its revenues in research and development.

Transfection consists in introducing a gene or a small interfering RNA into cells. This technique makes it possible to cross the cellular barriers and deliver such biomolecules into the cells for research or therapeutic purposes.

Customers of Polyplus-transfection's products and services include biotechnology and pharmaceutical companies as well as life science academic laboratories. Polyplus-transfection offers high quality consultancy, personalized scientific support and expertise in regulatory affairs related to the use of its reagents in clinical trials. Phases I/II cancer gene therapy and AIDS trials are underway in Israel, USA, Sweden and Germany using GMP-compliant reagents from Polyplus-transfection.

The Strasbourg-based company is recognized as a leading innovator in the transfection market, with ISO 9001:2000 certification, exclusive licenses from the CNRS and numerous patent applications pending. Polyplus-transfection R&D has well-established partnerships with biotech companies and is also involved in several European research collaboration networks, such as GIANT (Gene Therapy, an Integrated Approach to Neoplastic Treatment) and RIGHT (RNA Interference Technology as Human Therapeutic Tool).

Polyplus-transfection recently extended its field of expertise to the development of new cationic oligonucleotides, ZNA^{TM} , for molecular biology and diagnostics.

For more information, visit: http://www.polyplus-transfection.com

Contact Medias : Andrew Lloyd & Associates

Andrew Lloyd - Marie-Laure Melchior andrew@ala.com - marielaure@ala.com

Tel: +33 1 56 54 07 00