Media News

Branford, USA, September 24, 2008

Roche 454 Life Sciences and Integrated DNA Technologies to Enter Worldwide Exclusive Agreement for Primer Design and Supply

454 Life Sciences, a Roche company, and Integrated DNA Technologies, Inc., Coralville, USA announced today they have entered into an exclusive co-promotional agreement wherein IDT will design, synthesize, and purify the fusion primers required for certain 454 Sequencing applications. These applications include ultra-deep amplicon sequencing for detection of low-frequency mutations in disease associated genes, and the comprehensive identification and quantification of common and rare variants within a population. The partnership offers Genome Sequencer FLX System users a convenient solution for primer creation, streamlining workflow and relieving bioinformatics burdens.

IDT's easy-to-use online fusion primer design tool uses a gen-specific data base number or a supplied reference sequence to build appropriate 454 FusionPrimers for targeted DNA regions, including individual exons or all exons from one or more genes. DNA secondary structure, such as hairpin formation, can affect primer performance. The software takes into account performance metrics of the entire fusion primer rather than simply adding 454 Life Sciences' universal adaptor sequence to an otherwise standard PCR primer. In additional to 454 FusionPrimer design, IDT has expertise in high-fidelity synthesis and HPLC purification that can aid the researcher in obtaining the best quality data from their 454 sequencing System.

"We are pleased to leverage IDT's significant experience in primer design and construction to offer our customers a one-stop solution for all their targeted resequencing projects," explained

Chris McLeod, CEO of 454 Life Sciences, a Roche company. “By shifting the task of primer design to IDT’s online tool, researchers can now focus their efforts on making discoveries.”

As the only next generation technology with the ability to sequence more than 400 bases per read, the Genome Sequencer FLX System enables comprehensive analysis, including haplotyping, of complete exons and other genomic regions. A number of powerful applications are made possible by the system’s highly accurate long reads and simplified by this new primer design tool. These research applications include ultra deep sequencing for detection of low-frequency somatic mutations in cancer samples, discovery of rare variants in HIV infected individuals, analysis of exon sequences of disease-associated regions, identified by whole genome association studies and sequencing of 16S ribosomal RNA regions to characterize the microbial abundance and diversity in metagenomic samples.

To learn more about the diverse applications enabled by the Genome Sequencer FLX System, visit www.genome-sequencing.com. For 454 FusionPrimer design and ordering, visit www.idtdna.com.

454 Life Sciences, a center of excellence of Roche Applied Science, develops and commercializes the innovative 454 Sequencing System for ultra-high-throughput DNA sequencing. Specific applications include de novo sequencing and re-sequencing of genomes, metagenomics, RNA analysis, and targeted sequencing of DNA regions of interest. The hallmarks of the 454 Sequencing system are its simple, unbiased sample preparation and long, highly accurate sequence reads, including paired end reads. The technology of the 454 Sequencing system has enabled many peer-reviewed studies in diverse research fields, such as cancer and infectious disease research, drug discovery, marine biology, anthropology, paleontology and many more.

About Roche

Headquartered in Basel, Switzerland, Roche is one of the world’s leading research-focused healthcare groups in the fields of pharmaceuticals and diagnostics. As the world’s biggest biotech company and an innovator of products and services for the early detection, prevention, diagnosis and treatment of diseases, the Group contributes on a broad range of fronts to improving people’s health and quality of life. Roche is the world leader in in-vitro

diagnostics and drugs for cancer and transplantation, and is a market leader in virology. It is also active in other major therapeutic areas such as autoimmune diseases, inflammatory and metabolic disorders and diseases of the central nervous system. In 2007 sales by the Pharmaceuticals Division totalled 36.8 billion Swiss francs, and the Diagnostics Division posted sales of 9.3 billion francs. Roche has R&D agreements and strategic alliances with numerous partners, including majority ownership interests in Genentech and Chugai, and invested over 8 billion Swiss francs in R&D in 2007. Worldwide, the Group employs about 80,000 people. Additional information is available on the Internet at www.roche.com.

About IDT

Integrated DNA Technologies (IDT) is the largest supplier of custom nucleic acids in the United States, serving academic, government, and commercial researchers in biotechnology, clinical diagnostics, and pharmaceutical development. IDT's primary business is the manufacturing of custom, synthetic DNA and RNA oligonucleotides. Founded in 1987, by Joseph Walder, M.D., Ph.D. (Northwestern University), IDT has achieved annual double-digit growth over the past 10 years. Today, IDT synthesizes and ships an average of 36,000 custom oligos per day to more than 77,000 customers worldwide. IDT manufacturing locations include facilities in Coralville, Iowa; San Diego, Calif.; and Leuven, Belgium.

For further information please contact:

Roche Diagnostics
Dr. Burkhard Ziebolz
Phone: +49 8856 604830
Email: burkhard.ziebolz@roche.com

454 Life Sciences, a Roche company
Dr. Ulrich Schwoerer
Phone: 203-871-2300
Email: ulrich.schwoerer@roche.com