OriGene Technologies awarded NCI contract to develop high affinity anti-peptide antibodies for SISCAPA SRM assays in partnership with the Institute for Systems Biology

ROCKVILLE, MD--(Jan 30, 2014) – OriGene Technologies, Inc. ("OriGene"), one of the industry leaders in producing genome wide products for research and diagnostic applications, has been awarded a contract from the National Cancer Institute (NCI) to develop high affinity anti-peptide antibodies for SISCAPA assays.

Stable Isotope Standards and Capture by Anti-Peptide Antibodies (SISCAPA), an approach developed by Dr. Leigh Anderson, is a novel technology that can achieve high sensitivity quantitation of proteins in clinical samples using affinity-capture SRM Mass spectrometry. One of the most desirable aspects of SISCAPA technology is that it has the potential for simultaneous quantification of multiple proteins from a given sample making it is highly desirable in many applications to minimize sample requirements, handling, and assay costs per analyte. However, the capabilities of the SISCAPA technique are currently limited due to the scarcity of high affinity antibodies to the specific peptides that are generated by the fragmentation of the target protein before analysis.

Producing high quality antibodies for SISCAPA assays fits well with OriGene's long term goal of developing perfect assays for every human protein. The development of these antibodies is being performed in partnership with the Institute for Systems Biology (ISB) and in coordination with NCI's Clinical Proteomic Technologies for Cancer (CPTC) group. OriGene has previously collaborated with Dr. Robert Moritz, Director of Proteomics Research at ISB, for the generation of mass spec peptide profiles from over 5000 full length human proteins for inclusion in the complete human SRMAtlas. For the generation of high-affinity SISCAPA antibodies under this contract, OriGene will utilize a novel immunization strategy to develop high antibody titers in rabbits and will utilize the proteomics capabilities of the Moritz lab to identify, isolate and characterize the highest affinity antibodies suitable for SISCAPA approaches.

Dr. James Lazar, Vice President of Assay Development said, "OriGene is pleased to have been selected by NCI to receive this contract and to work with Dr. Moritz, a leader in this field. We believe that OriGene's unique expertise in antibody development will enable the true potential of SISCAPA technology and contribute to the development of important clinical assays".

Dr. Moritz commented: "This is a fantastic opportunity where we continue our collaboration with OriGene and combine our collective knowledge and expertise in antibody generation and protein chemistry to provide 'digitized' antibodies for the NCI CPTC program at the NIH and support the effort of shared resources."

About OriGene

OriGene Technologies, Inc. develops, manufactures, and sells genome wide research and diagnostic products worldwide. OriGene's research business offers one of the world's largest collections of cDNA clones, human proteins, antibodies and assays for use to study gene functions. Leveraging the recent advances in the human genome, OriGene utilizes its innovative R&D in the U.S. and large scale development and manufacturing capacity in China to produce an extensive array of ultra-specific monoclonal antibodies called UltraMAB™ which offers significantly value added diagnostic benefits for disease screening and personalized medicine treatment. OriGene's Protein Microarray Technology is used for QC diagnostic and therapeutic specificity and other protein-protein interactions. For more information, visit www.OriGene.com.

About ISB

The Institute for Systems Biology is a nonprofit biomedical research organization based in Seattle, Washington. It was founded in 2000 by systems biologist Leroy Hood, immunologist Alan Aderem, and protein chemist Ruedi Aebersold. ISB was established on the belief that the conventional models for exploring and funding breakthrough science have not caught up with the real potential of what is possible today. ISB serves as the ultimate environment where scientific collaboration stretches across disciplines, where our researchers have the intellectual freedom to challenge the status quo, and where grand visions for breakthroughs in human health inspire a collective drive to achieve the seemingly impossible. Our core values ensure that we always keep our focus on the big ideas that eventually will have the biggest impact on human health. Since 2000, ISB has grown to about 200 staffers, which includes 10 faculty members and laboratory groups.