



KINEXUS

Kinexus Study Reveals Unexpected Changes in Protein Kinase Profiles

Kinexus study reveals profound changes in protein kinase composition between rat and monkey tissues as published on the Science Magazine's Signal Transduction Knowledge Environment

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VANCOUVER, British Columbia - Kinexus Bioinformatics Corporation, a Vancouver-based proteomics and bioinformatics company, in collaboration with Science Magazine's Signal Transduction Knowledge Environment (STKE) is pleased to announce the release of the findings of a study that evaluated the expression of 78 different protein kinases in tissues and cell lines from humans, monkeys and rats. The perspective, entitled "*Plasticity of the Kinomes in Monkey and Rat Tissues*", was announced on page 1841 in the December 6, 2002 issue of Science Magazine and recently posted on the STKE website at www.stke.org. The new study revealed extensive differences in the levels of protein kinases in equivalent tissues from rat and monkey, which may account for the high failure rate of drug candidates that initially tested well in rodents but are unsuccessful following human trials.

The results from the study using the Kinetworks™ technology at Kinexus revealed profound differences in protein kinase expression patterns between different tissues and animal species which has important implications for drug development. Malfunctions in protein kinases have been linked to more than 400 human disease including cancer, diabetes, cardiovascular disease, and immune and neurological disorders. "With more than 50 protein kinase inhibitors currently in clinical trials, protein kinases have emerged as promising drug targets for drug discovery", reported Dr. Steven Pelech, President and Chief Scientific Officer of Kinexus, and a Professor in the Department of Medicine at the University of British Columbia. "Kinexus plans to deduce the composition and architecture of these kinase networks and apply this knowledge towards improving human health and welfare with diversified partners and clients. All of the Kinetworks™ screens for a wide range of cell signalling proteins are reliable, robust, highly sensitive, and utilize proprietary technologies designed to mitigate the risk while maximizing prospects in discovery-based research."

Kinexus provides customized and optimized antibody-based proteomics screening services to pharmaceutical and biopharmaceutical companies and academic research scientists. The results of these services are used to develop a novel cell signalling database. Kinexus currently provides these services to over 200 leading industrial and academic laboratories. Client benefits include the identification of disease markers and drugable targets, characterization of drug leads and validation of appropriate animal markers of human disease. The company's signal transduction focused proteomics database, which now comprises over 8,000 immunoblots, is being used for the discovery of novel signalling pathways linked with disease for drug development. The future application of this knowledge will facilitate disease diagnosis and personalized therapies to improve human health.

For further information, please contact Kinexus Bioinformatics Corporation toll free at 1-866-KINEXUS or visit our website at www.kinexus.ca.