



## **INGENUITY SYSTEMS ENHANCES WORKFLOW FOR EXPERIMENTAL TRANSCRIPTOME ANALYSIS IN SINGLE CELLS**

***Gene Expression Workflow Leverages Genetic Systems and Genomic Assays from Life Technologies Corporation***

**Redwood City, CA – October 26, 2009** – Ingenuity Systems, the leading provider of information solutions for life science researchers, today announced it has developed a new gene expression workflow with Life Technologies Corporation. The workflow leverages Ingenuity's IPA software and the Applied Biosystems SOLiD™ System and TaqMan® Gene Expression Assays and Arrays to open up new avenues for researchers to analyze and understand the transcriptome of individual cells, which is important for stem cell and disease research. Applied Biosystems is part of Life Technologies.

Scientists from Life Technologies and Ingenuity worked together to develop a joint workflow based on data published in a [Nature Methods](#) paper where whole transcriptome analysis using the SOLiD System was performed comparing wildtype single cells to those that had select genes "knocked out". Results were validated using TaqMan Assays for quantitative real-time PCR reactions. The team then used IPA to understand the functional impacts of this global gene expression disruption and to narrow in on key pathways and cellular processes. With this information, IPA helped the scientists create testable hypotheses for follow-up experiments using TaqMan Assays to validate transcript changes.

"One of our main objectives with IPA is to ensure that insights gained from gene expression profiles are used to help determine optimal follow-up experiments," said Peter DiLaura, Senior Vice President, Marketing and Products, Ingenuity Systems. "This joint workflow using the Applied Biosystems solutions and IPA helped researchers move from experiment to experiment by rapidly identifying relevant biological insights – such key mechanisms, functions, and pathways – and then providing a way to leverage those insights to design validation studies that help researchers better understand normal cellular and disease processes."

To learn more about this type of research, join Ingenuity and Life Technologies for free webinars on October 29th or November 3<sup>rd</sup>. [Register here](#).

### **About IPA®**

IPA is an all-in-one software application that enables researchers to model, analyze, and understand the complex biological and chemical systems at the core of life science research. For more information visit: [www.ingenuity.com](http://www.ingenuity.com)

### **About Ingenuity Systems®**

Ingenuity Systems is a leading provider of information solutions and custom services for life science researchers, computational biologists and bioinformaticists, and life science industry suppliers. For more information visit: [www.ingenuity.com](http://www.ingenuity.com)

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