



## **Life Technologies to Launch Ion 318 Chip in Second Half of 2011 with 1Gb of Data Output**

*PGM to Scale 100-Fold in Sequence Output in Less Than a Year*

**CARLSBAD, Calif. – Feb. 23, 2011** – [Life Technologies Corporation \(NASDAQ: LIFE\)](#) today announced that the Ion 318 semiconductor sequencing chip will be available for early access in September of this year, complete with RNA-Seq kits and analysis software, providing up to 1Gb of data output – 100 times more than original Ion 314 chip introduced two months ago with the [Ion Personal Genome Machine \(PGM™\) sequencer](#).

“Ion Torrent has increased the number of accessible sensors on the Ion 318 chip to 11 million, from 1.2 million on the Ion 314 chip and 6.1 million on the Ion 316 chip,” said Gregg Fergus, President of Ion Torrent. “The Ion 318 is ideal for applications like transcriptome sequencing, miRNA sequencing and ChIP-Seq. The Ion 318 requires no changes or upgrades to the Ion PGM sequencer – with Ion Torrent ‘The Chip is the Machine,’ so sequencing is easier and more economical than ever before.”

### **Scalability**

Internally, Ion Torrent has already achieved read lengths in excess of 300bp and improvements in chemistry and loading are expected to increase chip utilization by five-fold. By combining additional reads with longer read lengths, the company will achieve exceptional scalability on its Ion PGM sequencing platform and expects to reach read lengths of up to 400bp in 2012.

### **Simplicity**

As with the Ion 314 and Ion 316 chips, the Ion 318 chip will use simple PostLight™ sequencing chemistry, which requires no modified nucleotides, fluorescence, chemiluminescence or enzymatic cascades. As a result, Life Technologies will continue to deliver low-cost reagents and low-cost detection. The Ion 318 will also leverage four decades of exponential improvement in semiconductor technology, also known as Moore’s Law. This enables the Ion 318 to be priced the same as the Ion 316, even while delivering a 50-fold reduction in sequencing cost – less than a year after the Ion 314 launch.

### **Speed**

Because of its simple and flexible workflow, the Ion PGM enables parallel processing of 8 samples per operator, which allows researchers to go from sample to result in less than one day, making it the fastest long read sequencers on the market. Ion 318 chips will continue to offer incredible sequencing speeds, while delivering up to 1Gb of highly accurate sequence.

The Ion Personal Genome Machine sequencer is for research use only. Not for use in diagnostic procedures.

### **About Life Technologies**

[Life Technologies Corporation](#) (NASDAQ: LIFE) is a global biotechnology company dedicated to improving the human condition. Our systems, consumables and services enable researchers to accelerate scientific and medical advancements that make life even better. Life Technologies customers do their work across the biological spectrum, working to advance the fields of discovery and translational research, molecular medicine, stem cell-based therapies, food safety and animal health, and 21st century forensics. The company manufactures both molecular diagnostic and research use only products. Life Technologies' industry-leading brands are found in nearly every life sciences lab in the world and include innovative instrument systems under the Applied Biosystems and Ion Torrent names, as well as, the broadest range of reagents with its Invitrogen, Gibco, Ambion, Molecular Probes and Taqman products. Life Technologies had sales of \$3.6 billion in 2010, has a workforce of approximately 11,000 people, has a presence in approximately 160 countries, and possesses one of the largest intellectual property estates in the life sciences industry, with approximately 3,900 patents and exclusive licenses. For more information on how we are making a difference, please visit our website: <http://www.lifetechnologies.com>. Follow Life Technologies on Twitter [@LIFECorporation](#) and on [Facebook](#).

### **Life Technologies' Safe Harbor Statement**

This press release includes forward-looking statements about Life Technologies' anticipated results that involve risks and uncertainties. Some of the information contained in this press release, including, but not limited to, statements as to industry trends and Life Technologies' plans, objectives, expectations and strategy for its business, contains forward-looking statements that are subject to risks and uncertainties that could cause actual results or events to differ materially from those expressed or implied by such forward-looking statements. Any statements that are not statements of historical fact are forward-looking statements. When used, the words "believe," "plan," "intend," "anticipate," "target," "estimate," "expect" and the like, and/or future tense or conditional constructions ("will," "may," "could," "should," etc.), or similar expressions, identify certain of these forward-looking statements. Important factors which could cause actual results to differ materially from those in the forward-looking statements are detailed in filings made by Life Technologies with the Securities and Exchange Commission. Life Technologies undertakes no obligation to update or revise any such forward-looking statements to reflect subsequent events or circumstances.

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