

Denator demonstrates reliable preservation of lipids revealing true *in vivo*-levels

Gothenburg, Sweden, 18 March 2015:

Denator AB announced today that the company's heat-stabilization system has been demonstrated to preserve lipids at close-to-*in vivo*-levels. To preserve lipids in a reliable manner prior to mass spectrometry-based analysis is pivotal to accurately quantify and identify potential biomarkers and perform disease research.

Lipids play several key roles in biological systems including storing energy, cell-signalling and acting as components of cell membranes. Due to their multiple functions, and tight regulation, lipids are considered to be prime biomarker candidates. Mass spectrometry-based analysis of lipids, also called lipidomics, is an emerging field within systems biology. Large-scale studies of pathways and networks of lipids are performed to identify and quantify hundreds of different molecular lipid species with various structural and functional form. Unraveling this complexity will present a number of opportunities not only for performing disease research, drug discovery and biomarker identification but also in enabling personalized medicine.

However, it is often difficult to quantify accurate levels of lipids in tissue samples due to post-sampling changes that cause substantial variations in detected lipid levels during sample preparation. Using Denator's Stabilizor™ system, based on the company's proprietary heat-stabilization technology, has been shown to stop degradation and other post-sampling changes immediately and permanently. This ensure a stable sample from the moment of excision until the point of analysis which increases the accuracy and quality of analytical results.

A recently published paper demonstrated the preservation of lipids in tissue samples, at a close to *in vivo*-level, when using heat stabilization followed by mass spectrometry-based analysis. When using traditional methods, the continued enzymatic activity after sampling, resulted in substantial variation in lipid-levels over time. (*D. Saigusa, et al., Simultaneous Quantification of Sphingolipids in Small Quantities of Liver by LC-MS/MS, Mass Spectrometry (Tokyo) 2014; 3(4): S0046; DOI: 10.5702/massspectrometry.S0046*). This news will be of particular interest to researchers within pharmaceutical research areas such as diabetes, Alzheimer's disease, oncology, atherosclerosis and obesity.

Olof Sköld, CEO at Denator, says: "Lipidomics is a very promising research field for biomarker identification and drug research. We have now demonstrated the necessity of using our Stabilizor system when performing lipidomic research. We see this development as a natural step to ensure that researchers who heat-stabilize tissues upstream achieve the best possible analytical results downstream."

Implementation of the Stabilizor system in laboratory workflows is reflected in a growing number of peer-reviewed publications. By using heat stabilization, scientists are able to drastically improve the consistency of sample quality and discover new, biologically-relevant information without needing to use inhibitors.

ENDS

Press Release



Notes to Editors

Enquiries:

Karsten Fjärstedt, VP Global Marketing and Sales

Tel: +46 (0)705 106644

Email: karsten.fjarstedt@denator.com

About Denator AB

www.denator.com

Denator AB is a Swedish-based biotech company with a mission to enhance sample quality of biological samples and improve sample preparation in life science and clinical research markets. Based upon the company's proprietary heat-stabilization technology, Denator develops and markets products that stabilize biological samples from the moment of sampling throughout the analytical workflow. This enables scientists to significantly enhance the quality of data obtained from analytical techniques used downstream.

Stabilizor is a trademark of Denator AB.