# Covaris introduces a novel FFPE DNA extraction kit at AGBT 2013

WOBURN, Mass.  Feb. 22, 2013 – Covaris, Inc. introduced the single-tube FFPE DNA Extraction Kit at the 2013 Advances in Genome Biology and Technology (AGBT) meeting held recently in Marco Island, Florida. This newest innovation from Covaris provides an optimized reagent and protocol for high-yield DNA extraction from Formalin-Fixed, Paraffin Embedded (FFPE) tissue samples.  Adaptive Focused Acoustic™ (AFA) Technology is used to emulsify and separate the paraffin, while simultaneously re-hydrating the tissue sample in an aqueous solution within a few minutes.  Covaris Focused-ultrasonicators enable the purely mechanical processing of the samples, eliminating the need for organic solvents.  Large Molecular Weight DNA is efficiently extracted from FFPE samples, with greater yield when compared to organic extraction with other commercially available kits.  The AFA-based kit brings standardization to a previously uncontrolled pre-analytical preparatory step.

The FFPE Nucleic Acid Extraction Kit utilizes AFA Technology, the standard method for DNA fragmentation for Next Generation Sequencing (NGS).  An optional DNA fragmentation step can be included in the workflow to precisely size the DNA for applications requiring short DNA fragments, such as NGS – all in the same tube.  This optional integrated single-tube DNA Shearing streamlines the sample preparation workflow, while also doubling total DNA yield when compared to extraction without fragmentation.

FFPE is a widely used method for archiving tissue specimens; especially clinical samples.  Extraction of DNA or RNA from FFPE tissue has traditionally been a challenge as it requires removing the paraffin, rehydrating the sample, and reversing the formaldehyde cross-links, which results in low yields and poor quality of nucleic acid samples.  Additionally, the traditional extraction processes require the use of hazardous or difficult-to-handle solvents.  Archived FFPE tissues are a rich resource for studying gene variations or gene expression profile changes.  This trend has been growing with the continued advances in the fields of genomics and trancriptomics.  These new applications benefit from the high-quality starting material and improved workflow provided by the Covaris FFPE DNA Extraction Kit.

**About Covaris**
Covaris, Inc. (www.covarisinc.com) provides advanced sample preparation systems for life and analytical science.  Covaris sample prep technologies support a wide variety of applications including Next-Generation Sequencing, ChIP, proteomics, formulations, and compound management.  Our patented Adaptive Focused Acoustic™ (AFA™) technology is the industry standard for DNA shearing, and is used by major genome centers, academic, and clinical institutions worldwide.  AFA brings unsurpassed speed and efficiency to biological and chemical sample preparation. The AFA process, which is based on shock wave physics, delivers controlled, precise, and accurate acoustic energy to biological and chemical samples.