

Whole blood collection tubes, NGS panels, 11/16

November 2016—Qiagen launched its Paxgene Blood ccfDNA Tube for venous whole blood collection and room temperature stabilization of in vivo circulating cell-free DNA profiles.

Paxgene Blood ccfDNA aims to build a fully integrated and complete standardized system covering all preanalytical workflow steps from blood collection, stabilization, transport, storage, and isolation of high-quality ccfDNA.

The system contains a non-crosslinking reagent in the collection tube designed to ensure DNA remains unmodified. It aims to prevent post-collection release of genomic DNA from white blood cells, resulting in improved ccfDNA yield recovery with less background DNA. A minimized release of contents of ruptured red blood cells into blood plasma enables a maximized plasma recovery, particularly critical in cancer research.

The Paxgene tube, with its novel reagents, is compatible with an array of downstream applications such as noninvasive prenatal testing or methylation-based assays in cancer research and is for research use only.

In a separate release, Qiagen announced the launch of a comprehensive portfolio of novel Qiaseq NGS panels based on “Digital NGS” technology allowing unbiased, accurate quantification of DNA, RNA, and miRNA with next-generation sequencing. Digital NGS leverages molecular index technology, enabling more accurate quantification and detection of molecular variants across all sequencing platforms.

The panels enable reliable detection of extremely rare (low-frequency) mutations as well as highly efficient sequencing of GC-rich regions. In addition, this approach aims to ensure accurate identification and quantitation of otherwise frequently undetected genetic variations. The panels can be used for all common sample types and are available for various commercial NGS platforms. The assay roadmap for Qiagen’s GeneReader NGS system also builds on digital NGS.

Qiagen also announced the availability of a customized panel design service to allow customers unlimited content breadth for digital NGS panels because of novel chemistry and assay design. Digital NGS uses unique molecular indices to tag every molecule in a sample at an early stage with a unique marker to eliminate these errors from downstream analysis. The digital NGS-based products include the Qiaseq Targeted DNA and RNAscan Panels and the Qiaseq miRNA NGS Kits and Targeted RNAseq Kits.

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