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Twist Bioscience Unveils innovative solution to drive NGS adoption in AgBio

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Differentiated Ultra High-Throughput Library Preparation Solution at AGBT



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Twist Bioscience Corporation a company enabling customers to succeed through its offering of high-quality synthetic DNA using its silicon platform, today announced technology early access of the Twist Flex Prep Ultra High-Throughput (UHT) Kit, which aims to enable unparalleled throughput at a fraction of the cost of existing on market solutions, accelerating NGSâ?? microarray conversion and adoption in agricultural genomics.

Built upon enzymatic fragmentation library preparation, the Twist Flex Prep UHT Kit utilizes novel chemistry that accepts and self-normalizes a wide range of sample input amounts through a new proprietary Normalization By Ligation (NBL) technology. This is crucial for researchers in AgBio who sequence thousands of samples of varying inputs and removes the need to manually normalize each one, saving significant time and costs. The kit also enables enhanced multiplexing by pooling samples early in the workflow so that researchers can process more samples without additional capital investment. The enhanced multiplexing further limits hands on time and saves researchers costs of reagents in downstream purification and indexing steps. In addition, pooling samples significantly reduces cost and plastic waste from pipette tips and plates in high-throughput labs.

â??In agricultural genomics, researchers often test thousands of samples at once, relying heavily on automation to support large scale testing. Many researchers continue to perform traditional microarray based workflows, as overall higher cost per sample for NGS based workflow has hindered adoption,â?• said Emily M. Leproust, Ph.D., CEO and co-founder of Twist Bioscience. â??With the technology early access of our Twist Flex Prep UHT Kit, researchers will soon have access to a scalable, streamlined, and most importantly, cost effective NGS workflows for their various samples and research areas, and overcome the challenges that have caused slow adoption of NGS in the AgBio space. This ultra high-throughput solution could enable them to push new boundaries in breeding, trait selection, and other high-throughput applications, with high data quality while saving costs.â?•