

DSPath NGS Multiplex PCR Master Mix

Backgrounds

tNGS (Targeted Next-Generation Sequencing) is a targeted high-throughput sequencing technology for specific genes or genomes. Compared to whole genome sequencing (WGS) and whole exome sequencing (WES), tNGS can sequence specific genes or genomic regions based on different needs, resulting in higher sensitivity and lower cost. tNGS is commonly used in clinical diagnosis, genetic research, drug development and other fields, which can detect gene mutations, search for disease associations, assess individual disease risks, guide precise treatment, and so on.

The process of tNGS includes sample preparation, library preparation, sequencing, data analysis and interpretation. Library preparation is one of the critical steps in the process, requiring the selection of suitable primers / probes and sequencing platforms to ensure accurate and uniform sequencing.

GDSBio has developed **DSPath NGS Multiplex PCR Master Mix** for tNGS technology, a multiplex PCR premix solution for library preparation that allows for fast and accurate target library construction.

Applications

pathogenic microorganism tNGS; cancer gene tNGS; genetic disease tNGS; scientific research

Features

Excellent amplification performance: low mismatch rate and high specificity, capable of conducting super multiple amplification to construct high-quality DNA libraries.

Easy to use: all-in-one master mix, reducing operation and saving time in library preparation.

Wide applicability: compatible with various samples such as blood, nasal / throat swabs, viral cultures, and is widely used in pathogenic microorganism detection, cancer gene detection, scientific research, and other fields.

Validation Data

The DNA pathogen library constructed using GDSBio DSPath NGS Multiplex PCR Master Mix was tested using 480-plex pathogen panel, with a target read detection rate of 65 %, significantly higher than other similar products; the ratio of primer dimer reads is as low as 2.5 %, significantly lower than other similar products; at the same time, the homogeneity of the library is good.

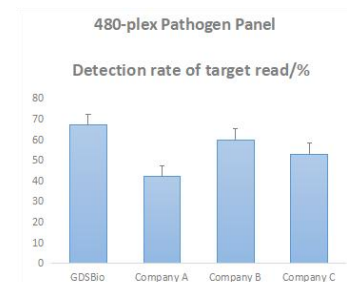


Fig. 1 Detection rate of target reads

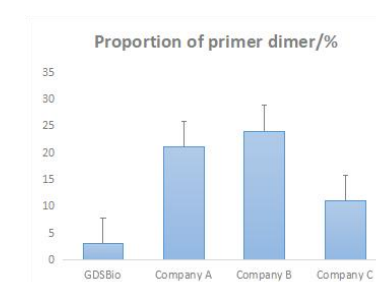


Fig. 2 Proportion of primer dimer

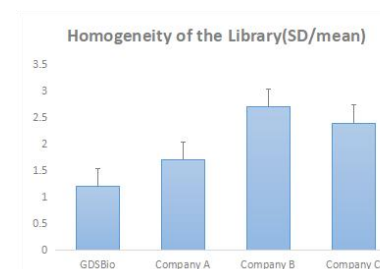


Fig. 3 Homogeneity of the Library

Ordering Information

Product Name	Cat. No.	Spec.	Quantity
DSPATH NGS Multiplex PCR Master Mix	K030-A	80 rxns	1 mL × 1
	K030-B	400 rxns	5 mL × 1