Product Information	
sparQ DNA Frag & Library Prep Kit	
Part Number	95194-024
Number of Reactions	24 Reactions
Storage Temperature	-25°C to -15°C
Lot Number	66211253
Reference Number	102521, 100821, 100521, 125080222, 081721, 020322, 275754832
Expiration Date	04/30/2023

Product Description:

The sparQ DNA Frag & Library Prep Kit provides reagents essential for enzymatic fragmentation of DNA and the construction of libraries for sequencing on Illumina® NGS platforms. The streamlined workflow can be completed in under 3 hours with minimal hands-on time and can accommodate DNA input amounts from 1 ng to 1000 ng. The DNA fragmentation and polishing reactions are combined in a single step producing fragmented DNA that is taken through 5´-phosphorylation and 3´-dA-tailing polishing reactions. Fragment size is tunable based on reaction time. Subsequent ligation of sequencing adapters can be performed without the need for an intervening cleanup step. The optional HiFi PCR Master Mix and Primer Mix allow unbiased amplification of fragments with appropriate adapters ligated to both ends. PCR-free workflows are enabled from 100 ng of starting material.

Component Part Numbers:

84552 DNA Frag & Polishing Enzyme Mix 240 µL
84554 DNA Frag & Polishing Buffer 120 µL
84556 DNA Frag & Polishing Enhancer Solution 288 µL
84518 DNA Ligase 240 µL
84520 DNA Ligation Buffer, 480 µL
84522 HiFi PCR Master Mix (2X) 600 µL
84524 Primer Mix 72 µL

Product Specifications	
95194	
Assay	**Library Functional Assay**
Specification	Functional

Quality Control Analysis and Specifications:

Library Prep Functional Assay: Quality of the sparQ DNA Frag & Library Prep Kit is tested functionally by preparation of a DNA library from bacterial genomic DNA with GC-content of 10-80%. The differences in library yield and profile among different lots must be within 15%. Sequencing of the amplified library must yield mapped reads >90% and normalized coverage between 0.7 and 1.3 across the full GC spectrum.

Enzyme components were tested prior to assembly and free of contaminating endonucleases and exonucleases. Enzyme purity was >95% as determined by SDS-PAGE and negligible *E. coli* genomic DNA contamination was confirmed by qPCR.

Limitations of Use

Quantabio products are intended for molecular biology applications. This product is not intended for the diagnosis, prevention or treatment of a disease.