

# sparQ mRNA-Seq Kit

## Ultra-sensitive mRNA library prep workflow with efficient poly(A) capture

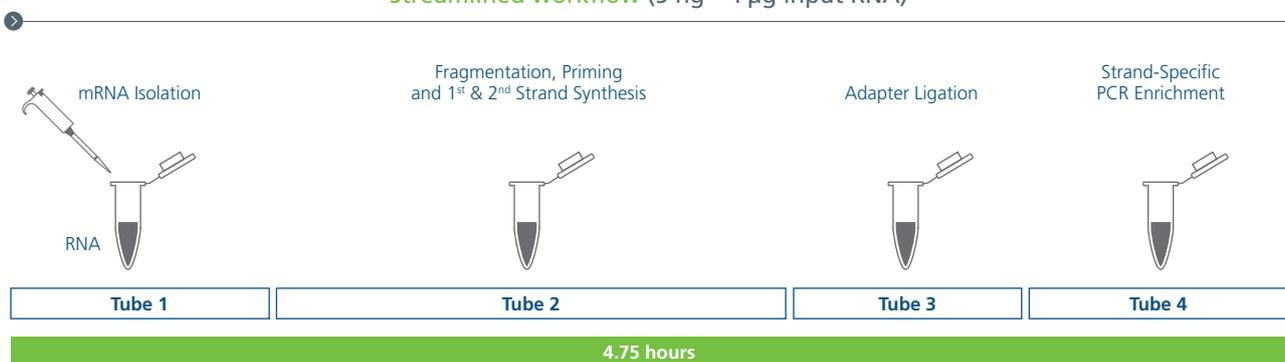
### FEATURES & BENEFITS:

- Highly sensitive mRNA detection with input as low as 5 ng of total RNA
- Reproducible transcript profiling
- High quality directional RNA library prep with streamlined workflow of 4.75 hours
- Efficient isolation of mRNA allowing detection of most coding genes

### DESCRIPTION:

sparQ mRNA-Seq Kit enables efficient preparation of stranded mRNA-seq libraries for Illumina® NGS platforms. The streamlined workflow reduces hands-on time and allows sample to sequencing in a single day. High-quality, reliable mRNA-seq libraries are delivered with consistency and reduced bias from as little as 5 ng and up to 1 µg of total RNA.

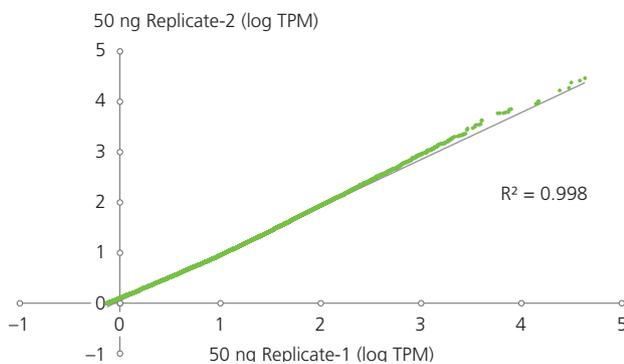
### Streamlined workflow (5 ng – 1 µg input RNA)



**Figure 1** sparQ mRNA-Seq Kit workflow delivers a simple workflow with a rapid protocol that allows for sample to sequencing in a single day.

### Reproducible Transcript Profiling

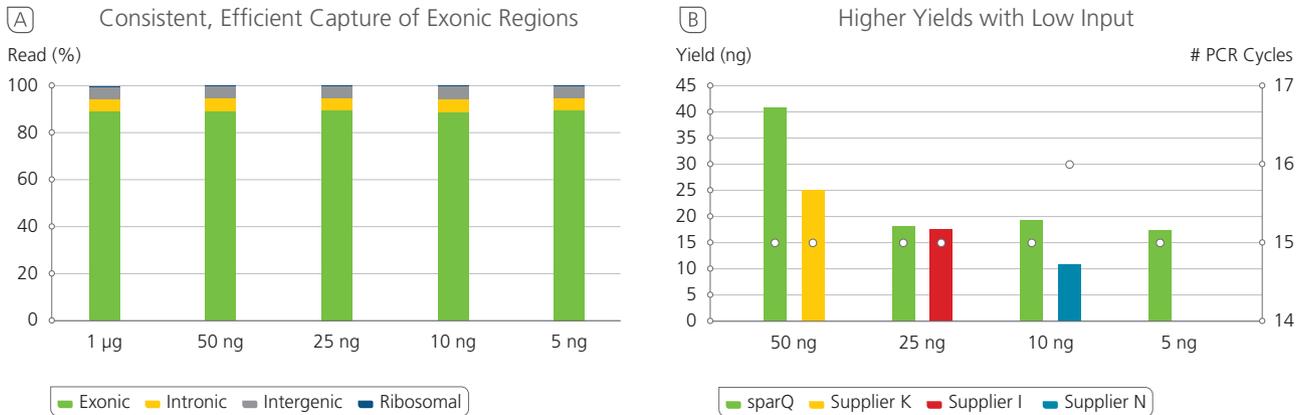
sparQ mRNA-Seq Kit demonstrates reproducibility across biological replicates.



**Figure 2** Transcript profiling. Transcript per million (TPM) profiles of 2 separate libraries (Replicate-1 and Replicate-2) using 50 ng UHR RNA were compared. Plot showed a correlation of >99% indicating high reproducibility.

## High Sensitivity

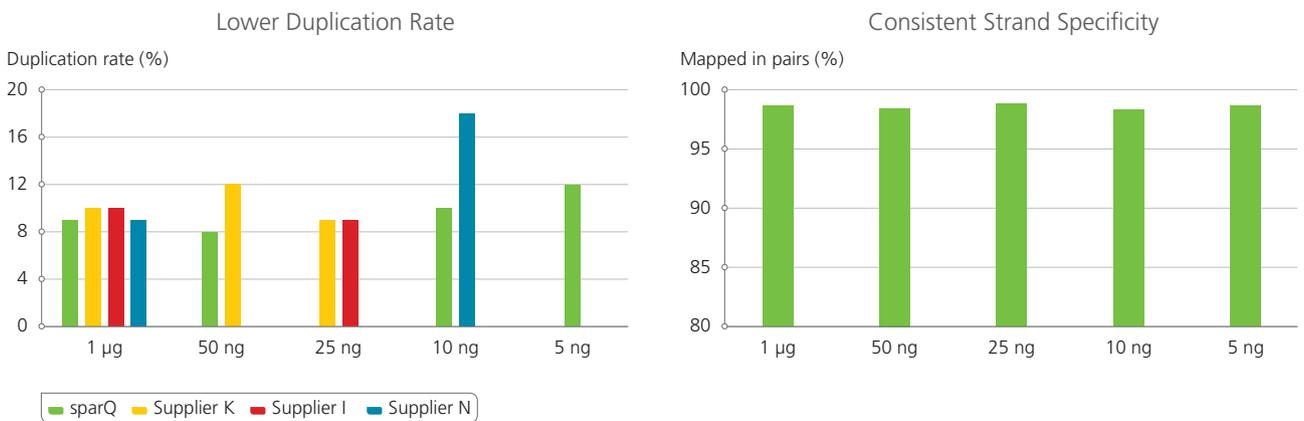
sparQ mRNA-Seq Kit enables preparation of libraries with low input amounts, down to 5 ng.



**Figure 3** sparQ mRNA-Seq Kit is highly sensitive. High quality libraries are generated across broad range of input amounts, down to 5 ng. sparQ mRNA-Seq libraries were compared against suggested minimum input amounts of other suppliers. **A** Consistently high proportion of protein coding reads and low rRNA reads (<1%) was achieved for efficient poly(A) mRNA isolation. **B** Higher library yield was observed with consistent number of PCR cycles regardless of input total RNA amount.

## Excellent Sequencing Metrics

sparQ mRNA-Seq Kit demonstrates excellent performance on all Illumina sequencing platforms. Elevated single strand specificity improved strand orientation for better transcript quantification.



**Figure 4** Duplication rate. Read duplication rate with sparQ mRNA-Seq Kit is either comparable or lower regardless of RNA input amounts.

**Figure 5** Strand specificity. Reads were mapped to human genome. sparQ mRNA-Seq libraries demonstrate consistently high strand specificity across input levels allowing for high quality downstream gene expression analysis.

## ORDER INFO

### Product Name

sparQ mRNA-Seq Kit - 24 R  
sparQ mRNA-Seq Kit - 96 R

### Quantabio Catalog Number

95218-024  
95218-096

### Size

24 rxns  
96 rxns

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