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# Connecting all dots with QuantSeq 3' mRNA-Seq



## Pioneering Gene Expression Profiling with QuantSeq

### The trusted all-round solution for straightforward mRNA sequencing

The patented QuantSeq technology targets the 3' ends of mRNA molecules for focused analysis of differential gene expression by RNA sequencing (RNA-Seq). As the **pioneer of 3' mRNA sequencing**, Lexogen has revolutionized the accessibility and usability of quantitative gene expression analysis. **QuantSeq is the preferred method for expression profiling** and widely trusted for its role in numerous groundbreaking discoveries made possible by 3' mRNA-Seq.



#### Simple & Fast Workflow

QuantSeq omits any pre-processing steps and generates sequencing-ready libraries from total RNA in <4.5 hours for mRNA-focused readout.



#### Unparalleled Scalability

QuantSeq enables **efficient, scalable high-throughput sequencing** with reduced read depth and increased multiplexing (up to 36,864 unique samples).



#### Robust performance on any sample input

QuantSeq is optimally suited for **low-quality and low input RNA** samples and the ideal choice for challenging material, including FFPE, blood, or plant samples.



#### One technology, numerous applications

The QuantSeq technology is versatile and applicable for advanced approaches, like high-throughput screening, targeted sequencing, and RNA kinetics studies.



Figure 1 | QuantSeq generates sequencing-ready libraries from total RNA in <4.5 hours without the need for any pre-processing steps.

## Simple & Fast Workflow

QuantSeq is a **rapid and efficient RNA-Seq library preparation method** that generates libraries directly from (polyadenylated) total RNA in less than 4.5 hours, without pre-processing steps (Fig. 1). QuantSeq is **automation-compatible and ready-to-use for seamless sequencing on various platforms**, including Illumina, Element Biosciences & others.

## Unparalleled Scalability

By capturing 3'ends of coding mRNAs, QuantSeq facilitates large-scale gene expression profiling by **enabling massive multiplexing, maximized sample throughput, and cost-effective shallow sequencing of cell-based screenings**. In contrast to mRNA-Seq, QuantSeq generates only one fragment per transcript at the 3' end resulting in less data to be processed and analyzed (Fig 2).

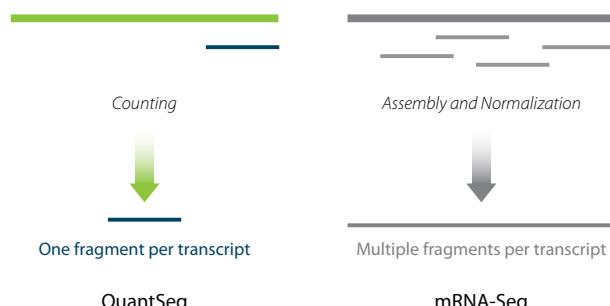


Figure 2 | QuantSeq enables simplified gene counting at the 3' end of coding RNA compared to full-length mRNA-Seq covering the entire transcript.

## Robust performance on any sample input

QuantSeq is a powerful technology for gene expression profiling generating robust and highly reproducible data from any RNA input amount, quality, or sample type. **QuantSeq is ideal for low RNA input (<10 ng total RNA) and even (heavily) degraded RNA (RIN <5)**, and is also considered a **reliable and robust all-around solution for challenging samples**, such as FFPE samples, plant tissue, or whole blood (Fig. 3).

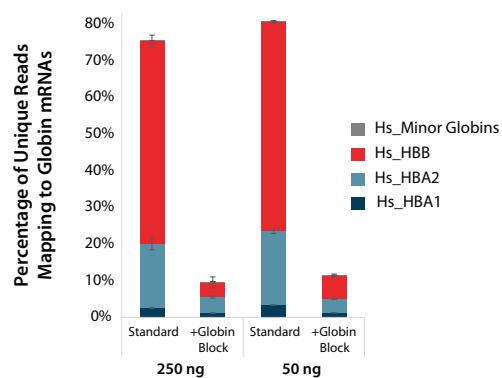


Figure 3 | Reads mapping to human globin mRNAs for QuantSeq libraries generated from 250 ng and 50 ng RNA input with and without Globin Block.

## One technology, numerous applications

QuantSeq unlocks the full potential of differential gene expression analysis by offering **one universal technology to a wide range of objectives, easing operation and throughput** (Fig. 4).

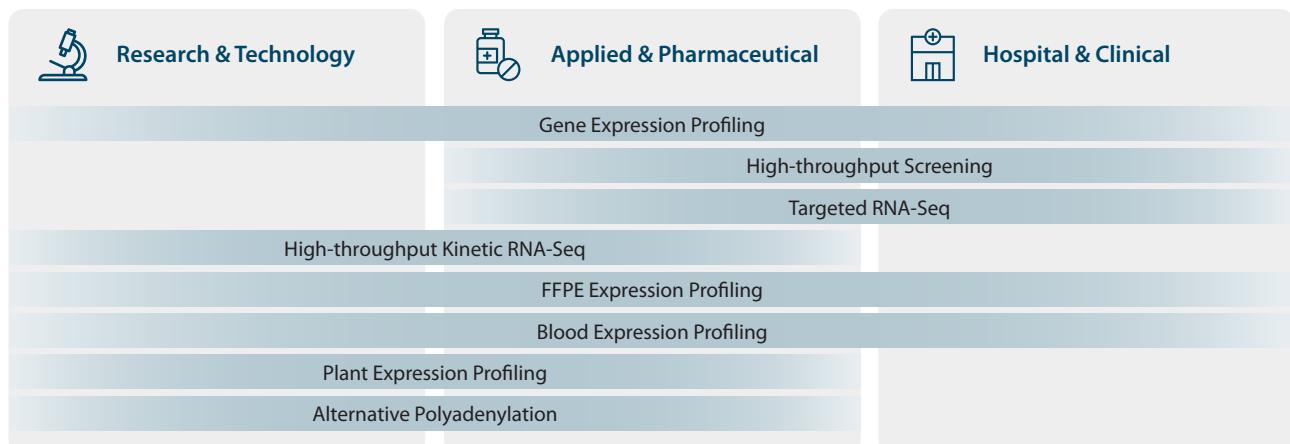


Figure 4 | QuantSeq technology is compatible with various RNA-Seq applications and sample types relevant to different fields.

## Ordering Information

Cat. No	Product Name
139	QuantSeq-Pool Sample-Barcoded 3'mRNA-Seq Library Prep Kit for High-throughput RNA-Seq
191-196	QuantSeq 3'mRNA-Seq V2 Library Prep Kit FWD for Gene Expression Profiling
222-223	QuantSeq FFPE 3'mRNA-Seq Library Prep Kit for FFPE Expression Profiling
225	QuantSeq 3'mRNA-Seq V2 Library Prep Kit (REV) for Alternative Polyadenylation Studies
227-230	SLAMseq Kinetic Kits with QuantSeq for High-throughput Kinetic RNA-Seq

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