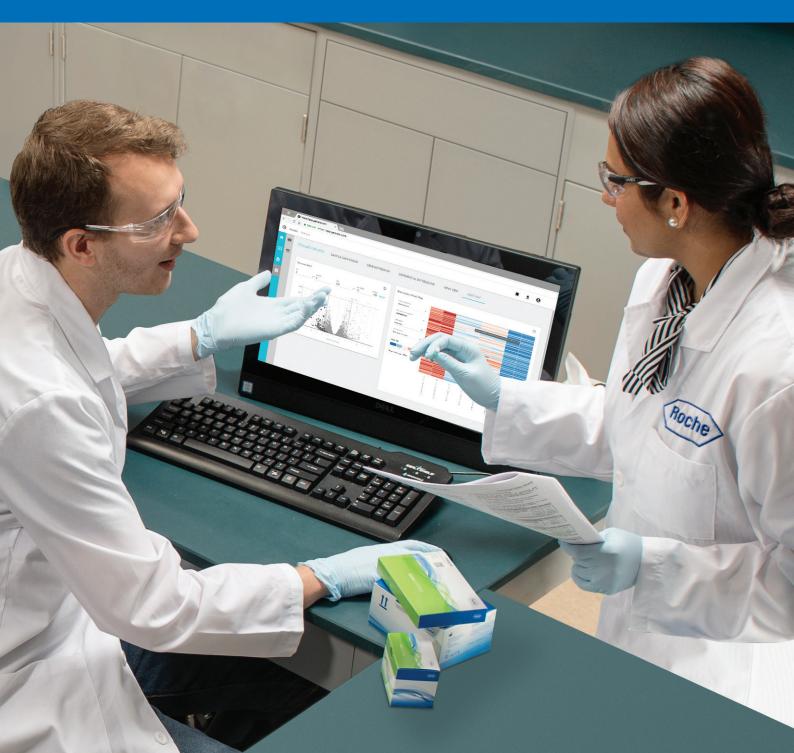


Application mRNA Sequencing from high-quality inputs

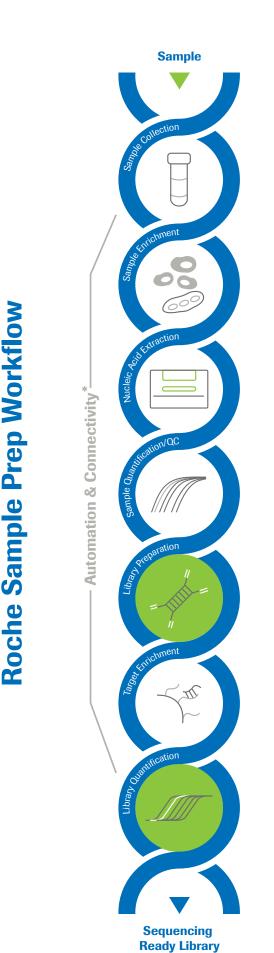
Unlock the Potential of Every Sample



Application: mRNA Sequencing from high-quality input

Application Challenges

- view of the **coding** transcriptome. To ensure
- bead technology relies on intact, polyadenylated transcripts, and may result
- cDNA synthesis, adapter ligation and library amplification. These laborious, multi-step protocols are often difficult to complete in a single workday.
- are inherently inefficient and biased,
- important to retain RNA strand orientation information.
- Analysis and visualization of RNA-Seg data requires advanced bioinformatics skills.



Data on file *Automation and Connectivity solutions are in development. KAPA and LightCycler are For Research Use Only. Not for use in diagnostic procedures. KAPA and LIGHTCYCLER are trademarks for Roche.

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Solutions



The **KAPA mRNA HyperPrep Kit** offers a complete mRNA library preparation solution from a wide range of inputs. Kits include **KAPA Pure Beads** for efficient, tunable reaction cleanups, and **KAPA HiFi HotStart ReadyMix** for high-efficiency, low-bias library amplification.

KAPA Adapters are QC-tested for NGS performance and barcode cross-contamination.



KAPA Library Quantification

Kits enable accurate, qPCR-based library quantification. Compatible with Roche LightCycler[®] 96 and LightCycler[®] 480 real-time PCR systems.



Qualified, single-click **Genialis**[™] data analysis pipeline and visualization tools.



Benefits

- Prepare high-quality libraries in a single workday with a streamlined, automation-friendly mRNA capture and library preparation workflow.
- Achieve optimal sequencing economy with effective mRNA enrichment and highly efficient library construction; which limits the number of reads associated with unwanted content and PCR duplicates.
- Introduce minimal bias during library amplification with KAPA HiFi HotStart ReadyMix to better preserve GC-rich and low-abundance transcripts.
- Achieve >99% strandedness to more accurately identify antisense transcripts and demarcate the boundaries of closely situated or overlapping genes.
- Take control of your data with the intuitive, cloud-based Genialis software*, which offers pre-configured pipelines and real-time visualization tools for biologists with limited bioinformatics expertise.
- Enjoy greater peace of mind with integrated support for a complete mRNA-Seq workflow solution.



Unlock the Potential of Every Sample

As the first step in the NGS workflow continuum, sample prep holds the key to unlocking the potential of every sample. Because NGS samples are precious, the best methods are needed to process more samples successfully, obtain more information from every sample, and optimize your sequencing resources. From sample collection to sequencing-ready libraries, Roche Sample Prep Solutions offer workflows for different sample types and sequencing applications that are **proven**, **simple** and **complete**.



Infographic

RNA-Seq made simple, from input to analysis. Roche Sequencing Solutions, 2018.



Webinar

The power of RNA: Broad application of RNA-based sequencing for transcriptome and genome analysis, featuring Dr. John Puritz (Department of Biological Sciences, University of Rhode Island, Kingston) and Heather Geiger (New York Genome Center, New York). Presented by Science and Roche Sequencing Solutions, 4 September 2018.





Publications

Guo M. et al. EZH2 Represses the B Cell Transcriptional Program and Regulates Antibody-Secreting Cell Metabolism and Antibody Production. *J. Immunol.* 2018;200(3):1039. doi:10.4049/jimmunol.1701470.

Nakamura BN, et al. A20 regulates canonical wnt-signalling through an interaction with RIPK4. *PLoS ONE*. 2018;13(5): e0195893. doi:10.1371/journal.pone.0195893.

Albariño CG, et al. Transcriptional analysis of viral mRNAs reveals common transcription patters in cells infected by five different filoviruses. *PLoS ONE*. 2018;13(8):e0201827. doi:10.1371/journal.pone.0201827.

Roche Cat. No.	KAPA Code	Description	Pack Size
08098115702	KK8580	KAPA mRNA HyperPrep Kit	24 reactions
08098123702	KK8581	KAPA mRNA HyperPrep Kit	96 reactions
08278555702	KK8722	KAPA Dual-Indexed Adapter Kit (15 μM)	96 x 20 μL
07960140001	KK4824	KAPA Library Quantification Kit (Illumina®/Universal)	500 reactions
07960298001	KK4854	KAPA Library Quantification Kit (Illumina/LC480)	500 reactions

Ordering information

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