

Expert brief

Solutions for high-quality analysis of single-stranded nucleic acids

Establishing reliable analytics for new modalities—such as messenger RNA [mRNA], self amplifying RNA [saRNA], circular RNA [circRNA], viral vectors and intermediate products for CRISPR-based gene editing—can be a daunting task.

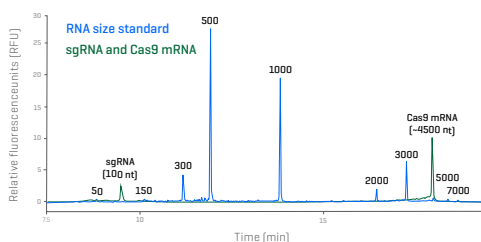
What are common challenges?

- Separation for purity assessments is difficult because of similar physical properties
- Some assays do not provide accurate and reproducible results
- Method development is time-consuming and costly
- Assays used in development might not be compatible with QC requirements

How do you overcome these challenges?

- High-quality hardware and consumables allow for high separation power using capillary gel electrophoresis
- Reliable data, can be ensured with high-precision, liquid-cooled capillary cartridges and temperature-controlled sample trays
- Kit-based workflows enable getting up to speed quickly
- Easy assay transferability between the BioPhase 8800 system and the PA 800 Plus system and compatibility with data management systems allows for seamless transfer to QC

sgRNA and mRNA

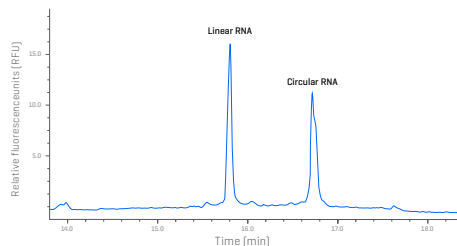


Read more about the workflow:

[Assessment of the integrity and purity of mRNAs from LNPs](#)

[High-resolution size and purity determination of sgRNA and Cas9 mRNA in a single analysis](#)

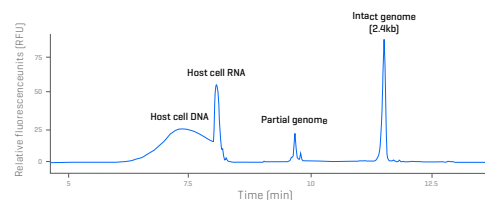
circRNA



Read more about the workflow:

[Separation of circular RNA from its linear precursor](#)

Viral vector genome



Read more about the workflow:

[Comprehensive assessment of adeno-associated viruses](#)



RNA 9000 Purity & Integrity kit

Assess the purity and integrity of RNA therapeutics, vaccines and single-stranded oligonucleotides

+



BioPhase 8800 system

Enable high data quality and the ability to run multiple samples in parallel

OR



PA 800 Plus system

Characterize therapeutic molecules with confidence using high data quality and kit-based workflows

Break through assay limitations by leveraging expertise from SCIEX and exploring solutions that provide high-quality data to move your next-generation modalities forward.

Visit our website to learn more about [mRNA research](#), [viral vector characterization](#) and [CRISPR/Cas9 analysis](#).