Datasheet

saCas9 mRNA LNP Premade Lipid Nanoparticle

Product Overview

saCas9 mRNA-LNP Premade Lipid Nanoparticle is a ready-to-use gene-editing delivery vehicle designed for efficient transfection of mRNA into cells and in vivo systems. The encapsulated wild-type *Staphylococcus aureus* Cas9 mRNA is formulated with optimized lipid nanoparticles (LNPs) for superior encapsulation, delivery, and protein translation post transfection or endosomal escape. This product is ideal for research in mRNA delivery, translation efficiency, cell viability, and gene editing studies.[1]

Catalog Numbers and Formulations

Catalog Number	Ionizable Lipid	Other Lipid Components
PG-LNP-SACAS03-Q100UG	MC3	DSPC, Cholesterol, DMG-PEG2000
PG-LNP-SACAS02-Q100UG	SM-102	DSPC, Cholesterol, DMG-PEG2000
PG-LNP-SACAS05-Q100UG	ALC-0315	DSPC, Cholesterol, DMG-PEG2000
PG-LNP-SACAS01-Q100UG	LP01	DSPC, Cholesterol, DMG-PEG2000

Specifications

Parameter	Description
Payload	saCas9 mRNA (wild type, S. aureus Cas9)
Formulation	Ionizable lipid (see above), DSPC, Cholesterol, DMG-PEG2000
mRNA Concentration	Batch-specific (typ. ~0.1mg/mL)
Storage Buffer	TBS with 10% Sucrose
Appearance	Clear, colorless
Storage	-20°C or below; avoid freeze-thaw cycles
Shipping	On dry ice

Stock	On-demand
Customization	Special formulations available upon request
For Research Use	Only (not for diagnostic use)

Key Features

- **High Encapsulation Efficiency:** Optimized LNP formulations for maximum mRNA payload.
- **Multiple Formulation Choices:** Four ionizable lipids to suit different research needs.
- **Superior Transfection:** Efficient delivery both in vitro and in vivo for robust gene editing.[1]
- **Consistency:** Batch-specific QC for concentration and performance.

Usage Notes

- Upon thawing, gently mix and avoid vigorous agitation.
- Minimize freeze/thaw cycles to preserve nanoparticle integrity.
- Use appropriate laboratory safety and molecular biology practices.

Applications

- Gene editing/CRISPR studies
- Evaluation of mRNA delivery and translation efficiency
- Cell viability and cytotoxicity assays
- Small-scale and pilot studies prior to scale-up

Contact Us

For special requests, technical support, or bulk ordering, please contact PreciGenome through the website.

For Research Use Only. Not for use in diagnostic procedures.