Datasheet

LipidFlex™ Lipid Nanoparticle Formulation Kit, 3-Lipid Mix and Ionizable Lipid

Product Overview

The LipidFlex™ Lipid Nanoparticle Formulation Kit provides a complete solution for generating high-quality lipid nanoparticles (LNPs) for nucleic acid delivery applications. Each kit contains a pre-mixed 3-component lipid blend and a specific ionizable lipid, offering researchers flexibility in formulation optimization for mRNA, siRNA, and other nucleic acid therapeutics.

Key Features & Benefits

Formulation Flexibility:

- Adjustable cationic/ionizable lipid ratios and tunable N/P ratios for optimization
- Easy-to-mix 4-component system and compatible with various buffer systems

Superior Performance:

- High transfection efficiency
- Excellent protein expression levels
- High cell viability maintenance
- Time-efficient synthesis process
- Narrow size distribution of mRNA LNPs

Applications

- Gene Therapy Research: mRNA, siRNA, circRNA delivery
- Vaccine Development: mRNA vaccine formulation
- Drug Delivery: Small molecule and protein therapeutics
- Cell Transfection: Primary cells and cell lines
- Nucleic Acid Encapsulation: DNA, RNA, protein delivery

Kit Components

Component	Quantity	Concentration	Description
Ionizable Lipid	25 mg	-	One of four options: MC3, SM-102, ALC-0315, or LP-01
3-Lipid Mix	1,000 µL	30 mM	Structural lipid/Cholesterol/Stabilizer mixture

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Storage & Stability

Storage Temperature	-20°C or below
Stability	12 months when stored properly
Protection Requirements	Store away from light and moisture

Ordering Information

Product	Catalog Number	Pack Size
LipidFlex™ Kit with MC3	PG-LPF03-Q1ML	1 kit
LipidFlex™ Kit with SM-102	PG-LPF02-Q1ML	1 kit
LipidFlex™ Kit with ALC-0315	PG-LPF05-Q1ML	1 kit
LipidFlex™ Kit with LP-01	PG-LPF01-Q1ML	1 kit

Custom Solutions

Custom lipid formulations, antibody conjugation protocols, and bulk kits are available.
Technical support and consultation services are provided for protocol optimization and troubleshooting.

Important Notes

For Research Use Only. This product is not for human or veterinary use.

For technical support, custom formulations, or bulk orders, please contact us.

Additional Considerations:

- Performance may vary depending on cell type and experimental conditions
- Optimal formulation conditions should be determined empirically
- Product specifications subject to batch-specific variations
- Refer to Certificate of Analysis for lot-specific data

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