

DC67409 | Galnac Lipid 83

Instructions for Use

Galnac Lipid 83 is developed by Prime Medicine Patent: WO2024220807. Galnac Lipid 83 is a GalNAc-conjugated lipid designed for targeted liver delivery. It features a triantennary GalNAc ligand linked via a PEG spacer (e.g., $-(CH_2CH_2O)_n-$) to a branched hydrophobic tail (C18 alkyl chains). The structure includes amide/ester bonds for stability and a stereospecific configuration (R/S) to optimize ASGPR receptor binding. Integrated into lipid nanoparticles (LNPs), it enhances hepatic uptake of nucleic acids (e.g., mRNA, gene editors) by leveraging ASGPR-mediated endocytosis. Its design balances hydrophilicity (PEG) and lipophilicity (alkyl chains) for efficient encapsulation and in vivo delivery, supporting therapeutic applications in liver-specific gene editing or RNA therapies.

Product information

CAS No.	Not available
Chemical Name	Galnac Lipid 83
Formula	C174H332O68N12
M.Wt	3,680.59
Purity	>98%
Storage	Original product: up to 1 year under the storage conditions stated on the vial, kept tightly sealed. Stock solutions: aliquots at -20°C , generally up to one month.
Shipping condition	Ships from Shanghai. Pure lipid is stable during ice-pack transport.

Formulation & study context

Literature values apply to the cited study only. Administration routes describe research, not clinical instructions.

A complete product-specific formulation has not been verified. No standard ratio is substituted.

N/P ratio	Not reported in the verified record
Cargo	Not available in the verified record
Administration route	Not available in the verified record
Animal model	Not available in the verified record
Formulation process	Not available in the verified record

N/P is a nitrogen-to-phosphate molar ratio. Lipid:cargo mass ratio is a different quantity and must not be used as N/P.

Stock-solution preparation table

Calculated using product-page MW: 3680.59 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	2.717 mL	0.543 mL	0.272 mL
25 mg	6.792 mL	1.358 mL	0.679 mL
50 mg	13.585 mL	2.717 mL	1.358 mL
100 mg	27.170 mL	5.434 mL	2.717 mL
250 mg	67.924 mL	13.585 mL	6.792 mL

Volume (mL) = mass (mg) × 1000 / [MW (g/mol) × concentration (mM)]. Mathematical conversions only; not measured solubility. Confirm solvent compatibility and the exact material before preparation.

Handling & storage

Provided that storage conditions are as stated on the product vial and the vial is kept tightly sealed, the product can be stored for up to 1 year.

Wherever possible, prepare and use solutions on the same day. If stock solutions must be prepared in advance, store them as aliquots in tightly sealed vials at -20°C. Generally, these will be usable for up to one month.

Before use, and prior to opening the vial, allow the product to equilibrate to room temperature for at least 1 hour.

References

Not available