DC67218 | Moderna Lipid compound 182(Lipid 29 analogue-1)

Instructions for Use

Moderna Lipid compound 182(Lipid 29 analogue-1) is a novel ionizable amine lipid developed by Moderna for the delivery of mRNA-based therapeutics. This lipid is part of Moderna's proprietary lipid nanoparticle (LNP) delivery platform, which is designed to encapsulate and protect mRNA, facilitate its cellular uptake, and enable efficient intracellular release. The ionizable nature of Lipid Compound 182 allows it to interact with mRNA at low pH (during LNP formulation) and release the payload in the neutral pH environment of the cytoplasm, making it a critical component of Moderna's mRNA delivery system.

Product information

CAS No.	Not available
Chemical Name	Moderna Lipid compound 182(Lipid 29 analogue-1)
Formula	C50H93N3O6
M.Wt	832.31521
Purity	ELSD-HPLC>95%
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: 832.31521 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	12.015 mL	2.403 mL	1.201 mL
25 mg	30.037 mL	6.007 mL	3.004 mL
50 mg	60.073 mL	12.015 mL	6.007 mL
100 mg	120.147 mL	24.029 mL	12.015 mL
250 mg	300.367 mL	60.073 mL	30.037 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