

DC67554 | MeTis Lipid 1

Instructions for Use

MeTis Lipid 1 is an ionizable lipid featuring a pentacyclic core with geminal dimethyl groups and symmetrical C9 alkyl chains developed by Metis Pharm. According to Patent WO 2025/140421 A1, Lipid 1 demonstrated exceptional biological performance including: the highest SARS-CoV-2 neutralization titer (NT50 1:2146, 5.7-fold higher than ALC0315), potent humoral immunity with COVID-19 IgG titers reaching 1:1,000,000 post-boost and exclusive validation for VZV-gE IgG (1:1,000,000), favorable biophysical properties (124.5 nm LNP diameter, 0.2 PDI, 85% encapsulation efficiency), and excellent safety profile (hERG IC₅₀ >30 µM, Mini-Ames negative), establishing it as the lead compound in nucleic acid vaccine delivery.

Product information

CAS No.	Not available
Chemical Name	MeTis Lipid 1
Formula	C48H93O6N
M.Wt	780.27
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: 780.27 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	12.816 mL	2.563 mL	1.282 mL
25 mg	32.040 mL	6.408 mL	3.204 mL
50 mg	64.080 mL	12.816 mL	6.408 mL
100 mg	128.161 mL	25.632 mL	12.816 mL
250 mg	320.402 mL	64.080 mL	32.040 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