

DC67127 | Lipid DIM1

Instructions for Use

Lipid DIM1 is an ionizable cationic lipid that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs) for mRNA delivery in vitro.¹ LNPs containing lipid DIM1 and encapsulating mRNA encoding a luciferase reporter induce luminescence in primary mouse adipose stem cells (ASCs).

Product information

CAS No.	Not available
Chemical Name	Lipid DIM1
Formula	C ₆₀ H ₁₂₀ N ₂ O ₈
M.Wt	997.60
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: 997.6 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	10.024 mL	2.005 mL	1.002 mL
25 mg	25.060 mL	5.012 mL	2.506 mL

Mass	1 mM	5 mM	10 mM
50 mg	50.120 mL	10.024 mL	5.012 mL
100 mg	100.241 mL	20.048 mL	10.024 mL
250 mg	250.601 mL	50.120 mL	25.060 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