

DC66222 | SIL Lipid

Instructions for Use

SIL lipid is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of siRNA in vitro.¹ LNPs containing SIL lipid and encapsulating siRNA targeting mRNA encoding the purinergic P2X7 receptor decrease protein levels of the purinergic P2X7 receptor, reduce migration in a wound healing assay, and induce apoptosis and necrosis in 4T1 breast cancer cells.

Product information

CAS No.	Not available
Chemical Name	SIL Lipid
Formula	C54H108N4O6
M.Wt	909.5
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: 909.5 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	10.995 mL	2.199 mL	1.100 mL
25 mg	27.488 mL	5.498 mL	2.749 mL

Mass	1 mM	5 mM	10 mM
50 mg	54.975 mL	10.995 mL	5.498 mL
100 mg	109.951 mL	21.990 mL	10.995 mL
250 mg	274.876 mL	54.975 mL	27.488 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