

DC60482 | DIM7S

Instructions for Use

DIM7S is a sugar-alcohol-derived ionizable lipid with mannitol as the precursor. DIM7S LNP is 10-fold, 30-fold, 20-fold, 4-fold and 3-fold superior in mRNA delivery than Lipo 3K, Electro, ALC-0315, MC3 and SM-102, respectively. DIM7S LNP enables effective CD40 mRNA delivery into human peripheral blood monocyte-derived DCs without obvious cytotoxicity.

Product information

CAS No.	Not available
Chemical Name	DIM7S
Formula	C ₈₄ H ₁₆₀ O ₁₂ N ₂
M.Wt	1,390.21
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: 1390.21 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	7.193 mL	1.439 mL	0.719 mL
25 mg	17.983 mL	3.597 mL	1.798 mL

Mass	1 mM	5 mM	10 mM
50 mg	35.966 mL	7.193 mL	3.597 mL
100 mg	71.932 mL	14.386 mL	7.193 mL
250 mg	179.829 mL	35.966 mL	17.983 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