

DC68207 | Q1-SM-102 iodide

Instructions for Use

Q1-SM-102 iodide is a quaternary ammonium lipid derivative of SM-102. Q1-SM-102 iodide can be used to prepare lipid nanoparticles (LNPs) for the delivery of mRNA in vivo. Q1-SM-102 iodide is a carriers for targeting delivery of mRNA to immune organs.

Product information

CAS No.	Not available
Chemical Name	Q1-SM-102 iodide
Formula	C ₄₅ H ₉₀ INO ₅
M.Wt	852.10
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: 852.1 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	11.736 mL	2.347 mL	1.174 mL
25 mg	29.339 mL	5.868 mL	2.934 mL
50 mg	58.679 mL	11.736 mL	5.868 mL

Mass	1 mM	5 mM	10 mM
100 mg	117.357 mL	23.471 mL	11.736 mL
250 mg	293.393 mL	58.679 mL	29.339 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