DC68190 | SM-102 azide

Instructions for Use

SM-102 azide is an azide-modified derivative of the clinically validated SM-102 ionizable lipid. Designed specifically for advanced Lipid Nanoparticle (LNP) formulation, this product integrates a reactive azide (-N_3) group to enable effortless, high-yield functionalization via click chemistry. It is the ideal tool for researchers and developers looking to construct targeted nucleic acid delivery systems, build diverse lipid libraries, or track LNPs in vivo.

Product information

CAS No.	Not available
Chemical Name	SM-102 azide
Formula	C44H86N4O4
M.Wt	735.18
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: 735.18 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.602 mL	2.720 mL	1.360 mL

Mass	1 mM	5 mM	10 mM
25 mg	34.005 mL	6.801 mL	3.401 mL
50 mg	68.011 mL	13.602 mL	6.801 mL
100 mg	136.021 mL	27.204 mL	13.602 mL
250 mg	340.053 mL	68.011 mL	34.005 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