

DC67463 | CP-LC-1428

Instructions for Use

Derived from the natural amino acid homocysteine, CP-LC-1428 is an ionizable cationic lipid that enables highly efficient in vivo delivery of multiple RNA formats (including mRNA, cRNA and saRNA) with robust protein expression. When formulated into standard LNPs (50:38.5:10:1.5 molar ratio of ionizable lipid:cholesterol:DOPE:PEG-lipid), it demonstrates superior spleen-selective targeting compared to conventional delivery systems following intravenous administration, while maintaining an excellent safety profile.

Product information

CAS No.	Not available
Chemical Name	CP-LC-1428
Formula	C53H101N3O8S3
M.Wt	1,004.6
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: 1004.6 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	9.954 mL	1.991 mL	0.995 mL

Mass	1 mM	5 mM	10 mM
25 mg	24.886 mL	4.977 mL	2.489 mL
50 mg	49.771 mL	9.954 mL	4.977 mL
100 mg	99.542 mL	19.908 mL	9.954 mL
250 mg	248.855 mL	49.771 mL	24.886 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