

DC42537 | ALC-0315

Instructions for Use

ALC-0315 is an ionisable aminolipid that used for mRNA compaction and aids mRNA cellular delivery. ALC-0315 can be used to form lipid nanoparticle (LNP) delivery vehicles.

Product information

CAS No.	Not available
Chemical Name	ALC-0315
Formula	C48H95NO5
M.Wt	766.27
Purity	>99%
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: 766.27 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.050 mL	2.610 mL	1.305 mL
25 mg	32.626 mL	6.525 mL	3.263 mL
50 mg	65.251 mL	13.050 mL	6.525 mL

Mass	1 mM	5 mM	10 mM
100 mg	130.502 mL	26.100 mL	13.050 mL
250 mg	326.256 mL	65.251 mL	32.626 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

- [1]. Lutz J, et, al. Novel rsv rna molecules and compositions for vaccination. WO2019202035A1.
- [2]. Kulkarni JA, et, al. Lipid Nanoparticles Enabling Gene Therapies: From Concepts to Clinical Utility. Nucleic Acid Ther. 2018 Jun;28(3):146-157.