

DC67212 | Acuitas Lipid III-25

Instructions for Use

Acuitas Lipid III-25 is an novel ionizable amine lipid used for mRNA delivery from Acuitas Therapeutics patent US 10,166,298 B2, with pKa 6.22, Liver Luc 1648 for 0.3mgkg(ng luc/g liver), Liver Luc 13880 for 1mgkg(ng luc/g liver) . It is an analgous of ALC-0315, showing higher activity than ALC-0315.

Product information

CAS No.	Not available
Chemical Name	Acuitas Lipid III-25
Formula	C ₄₆ H ₉₁ NO ₅
M.Wt	738.2
Purity	ELSD-HPLC>95%
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: 738.2 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.546 mL	2.709 mL	1.355 mL
25 mg	33.866 mL	6.773 mL	3.387 mL
50 mg	67.732 mL	13.546 mL	6.773 mL

Mass	1 mM	5 mM	10 mM
100 mg	135.465 mL	27.093 mL	13.546 mL
250 mg	338.662 mL	67.732 mL	33.866 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

Acuitas Therapeutics patent US 10,166,298 B2