

DC60478 | ALC-0366

Instructions for Use

ALC 0366 is an ionizable cationic lipid ($pK_a = 6.25$) from Biontech, which is derived from ALC-0315. ALC0366 has been used as a key component of LNP to deliver BNT142, a lipid nanoparticle (LNP)-formulated RNA (RNA-LNP) encoding a T cell-engaging bispecific antibody that monovalently binds the T cell marker CD3 and bivalently binds claudin 6 (CLDN6), an oncofetal antigen that is absent from normal adult tissue but expressed on various solid tumors.

Product information

CAS No.	Not available
Chemical Name	ALC-0366
Formula	C ₄₅ H ₈₉ NO ₅
M.Wt	724.2
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: 724.2 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.808 mL	2.762 mL	1.381 mL

Mass	1 mM	5 mM	10 mM
25 mg	34.521 mL	6.904 mL	3.452 mL
50 mg	69.042 mL	13.808 mL	6.904 mL
100 mg	138.083 mL	27.617 mL	13.808 mL
250 mg	345.209 mL	69.042 mL	34.521 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

Preclinical efficacy and pharmacokinetics of an RNA-encoded T cell-engaging bispecific antibody targeting human claudin 6-Sci Transl Med
. 2024 May 22;16(748):eadl2720. doi: 10.1126/scitranslmed.adl2720.