DC80050 | LIPID A6

Instructions for Use

Lipid A6 is an ionizable cationic and biodegradable alkyne lipid (pKa = 6.65).It has been used with other lipids in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA. LNPs containing lipid A6 and encapsulating mRNA encoding human erythropoietin (EPO) increase and then maintain homeostatic levels of hemoglobin in the blood in an adenine-induced mouse model of renal anemia.

Product information

CAS No.	Not available
Chemical Name	LIPID A6
Formula	C43H75NO6
M.Wt	701.56
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: 701.56 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	14.254 mL	2.851 mL	1.425 mL
25 mg	35.635 mL	7.127 mL	3.563 mL

Mass	1 mM	5 mM	10 mM
50 mg	71.270 mL	14.254 mL	7.127 mL
100 mg	142.539 mL	28.508 mL	14.254 mL
250 mg	356.349 mL	71.270 mL	35.635 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