

DC65852 | C3-K2-E14

Instructions for Use

C3-K2-E14 is an ionizable cationic lipid ($pK_a = 5.5$).¹ It has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA or siRNA in vitro and in vivo.

Product information

CAS No.	Not available
Chemical Name	C3-K2-E14
Formula	C ₆₉ H ₁₄₁ N ₅ O ₆
M.Wt	1,136.9
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: 1136.9 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	8.796 mL	1.759 mL	0.880 mL
25 mg	21.990 mL	4.398 mL	2.199 mL
50 mg	43.979 mL	8.796 mL	4.398 mL

Mass	1 mM	5 mM	10 mM
100 mg	87.958 mL	17.592 mL	8.796 mL
250 mg	219.896 mL	43.979 mL	21.990 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