

DC60555 | C14-O2

Instructions for Use

C14-O2 is an oxidized lipid for mRNA delivery. C14-O2-LNP is capable of potent and selective delivery of mRNA to blood monocytes. C14-O2 LNP is used to deliver a functional CD19-CAR mRNA and is shown to engineer functional CAR monocytes directly in situ.

Product information

CAS No.	Not available
Chemical Name	C14-O2
Formula	C88H181N5O9
M.Wt	1,453.4
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: 1453.4 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	6.880 mL	1.376 mL	0.688 mL
25 mg	17.201 mL	3.440 mL	1.720 mL
50 mg	34.402 mL	6.880 mL	3.440 mL

Mass	1 mM	5 mM	10 mM
100 mg	68.804 mL	13.761 mL	6.880 mL
250 mg	172.010 mL	34.402 mL	17.201 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