

DC80066 | 306Oi10

Instructions for Use

306Oi10 is a branched ionizable lipid that can be used to construct lipid nanoparticles (LNPs) for delivering messenger RNA. The surface ionization of lipid nanoparticles is related to the effectiveness of mRNA delivery. The tail of 306Oi10 has a one-carbon branch, which provides it with stronger surface ionization compared to lipids with linear tails, thereby enhancing its mRNA delivery efficacy. 306Oi10 can be used in research related to mRNA delivery.

Product information

CAS No.	Not available
Chemical Name	306Oi10
Formula	C59H115N3O8
M.Wt	993.8684
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: 993.8684 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	10.062 mL	2.012 mL	1.006 mL

Mass	1 mM	5 mM	10 mM
25 mg	25.154 mL	5.031 mL	2.515 mL
50 mg	50.308 mL	10.062 mL	5.031 mL
100 mg	100.617 mL	20.123 mL	10.062 mL
250 mg	251.542 mL	50.308 mL	25.154 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