DC60545 | 200Oi10

Instructions for Use

200Oi10 is a highly potent, biodegradable ionizable lipidoid optimized for targeted mRNA delivery, with its organ tropism dynamic to the route of administration. Under intravenous injection, it demonstrates an extraordinary 97.7% liver specificity mediated by endogenous ApoE binding. Strikingly, shifting to intraperitoneal injection redirects its tropism, yielding up to 46.4% pancreatic targeting, which can be further boosted when co-formulated with DOTAP. Featuring ester-conjugated cleavable tails, 200Oi10 guarantees rapid metabolic clearance and negligible tissue accumulation toxicity, making it an exceptional candidate for localized pancreatic therapy and efficient hepatic gene delivery.

Product information

CAS No.	Not available
Chemical Name	200Oi10
Formula	C75H145O10N5
M.Wt	1,277.01
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: 1277.01 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	7.831 mL	1.566 mL	0.783 mL
25 mg	19.577 mL	3.915 mL	1.958 mL
50 mg	39.154 mL	7.831 mL	3.915 mL
100 mg	78.308 mL	15.662 mL	7.831 mL
250 mg	195.770 mL	39.154 mL	19.577 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

Enhancing RNA-lipid nanoparticle delivery: Organ- and cell-specificity and barcoding strategies-J Control Release. 2024 Sep 18;375:366388.