

DC57046 | ATX-126(ATX-0126, lipid 10p)

Instructions for Use

ATX-126(ATX-0126, 10p) is an ionizable cationic lipid ($pK_a = 6.38$). It has been used in the generation of lipid nanoparticles (LNPs) for the delivery of siRNA. Intravenous administration of LNPs containing ATX-126(ATX-0126, 10p) and encapsulating Factor VII siRNA decrease Factor VII blood levels in mice.

Product information

CAS No.	Not available
Chemical Name	ATX-126(ATX-0126, lipid 10p)
Formula	C ₄₄ H ₈₆ N ₂ O ₅ S
M.Wt	755.23
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: 755.23 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.241 mL	2.648 mL	1.324 mL
25 mg	33.102 mL	6.620 mL	3.310 mL
50 mg	66.205 mL	13.241 mL	6.620 mL

Mass	1 mM	5 mM	10 mM
100 mg	132.410 mL	26.482 mL	13.241 mL
250 mg	331.025 mL	66.205 mL	33.102 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

1. Rajappan, K., Tanis, S.P., Roberts, S., et al. Development of a safe and scalable process for the production of a high-purity thiocarbamate-based ionizable lipid as an excipient in mRNA-encapsulating lipid nanoparticles. Org. Process Res. Dev. 25(6), 1383-1390 (2021).
2. Rajappan, K., Tanis, S.P., Mukthavaram, R., et al. Property-driven design and development of lipids for efficient delivery of siRNA. J. Med. Chem. 63(21), 12992-13012 (2020).