

DC60212 | NT1-O14B

Instructions for Use

NT1-O14B is a tryptamine-containing cationic lipidoid.¹ It has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs). Intravenous administration of LNPs containing NT1-O14B and encapsulating antisense nucleotides against tau decreases tau brain levels in mice.

Product information

CAS No.	Not available
Chemical Name	NT1-O14B
Formula	C ₄₀ H ₆₈ N ₂ O ₄ S ₄
M.Wt	769.230
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: 769.23 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	13.000 mL	2.600 mL	1.300 mL
25 mg	32.500 mL	6.500 mL	3.250 mL
50 mg	65.000 mL	13.000 mL	6.500 mL

Mass	1 mM	5 mM	10 mM
100 mg	130.000 mL	26.000 mL	13.000 mL
250 mg	325.000 mL	65.000 mL	32.500 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. Ma, F., Yang, L., Sun, Z., et al. Neurotransmitter-derived lipidoids (NT-lipidoids) for enhanced brain delivery through intravenous injection. Sci. Adv. 6(30), eabb4429 (2020).