

DC83230 | TNT-b10

Instructions for Use

TNT-b10 is a novel Lipid-like compound suitable for delivery of siRNA and mRNA both in vitro and in vivo. TNT-b10 LLNs was more than 10-fold more potent than TNT-a10 LLNs formulated under the same condition.

Product information

CAS No.	Not available
Chemical Name	TNT-b10
Formula	C ₄₈ H ₉₆ N ₆ O ₆
M.Wt	853.3
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: 853.3 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	11.719 mL	2.344 mL	1.172 mL
25 mg	29.298 mL	5.860 mL	2.930 mL
50 mg	58.596 mL	11.719 mL	5.860 mL

Mass	1 mM	5 mM	10 mM
100 mg	117.192 mL	23.438 mL	11.719 mL
250 mg	292.980 mL	58.596 mL	29.298 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

Effects of local structural transformation of lipid-like compounds on delivery of messenger RNA-Sci Rep . 2016 Feb 26;6:22137. doi: 10.1038/srep22137. Bin Li 1, Xiao Luo 1, Binbin Deng 2, JoLynn B Giancola 3, David W McComb 2, Thomas D Schmittgen 4, Yizhou Dong 1