

DC49845 | TT3-LLN

Instructions for Use

TT3 is an ionizable cationic amino lipid that has been used in combination with other lipids in the formation of lipid-like nanoparticles (LLNs). Administration of LLNs containing TT3 and encapsulating mRNA encoding human coagulation Factor IX induces human coagulation Factor IX expression in the plasma of mice.

Product information

CAS No.	Not available
Chemical Name	TT3-LLN
Formula	C90H174N6O3
M.Wt	1,388.38298749924
Purity	>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: 1388.38298749924 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	7.203 mL	1.441 mL	0.720 mL
25 mg	18.007 mL	3.601 mL	1.801 mL

Mass	1 mM	5 mM	10 mM
50 mg	36.013 mL	7.203 mL	3.601 mL
100 mg	72.026 mL	14.405 mL	7.203 mL
250 mg	180.066 mL	36.013 mL	18.007 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

Li, B., Luo, X., Deng, B., et al. An orthogonal array optimization of lipid-like nanoparticles for mRNA delivery in vivo. Nano Lett. 15(12), 8099-8107 (2015).