

DC67120 | YSK12-C4 (YSK12-MEND)

Instructions for Use

YSK 12C4 is an ionizable cationic lipid primarily used to enhance siRNA cellular delivery via multifunctional envelope-type nanodevices (MEND). YSK 12C4 promotes siRNA uptake and endosomal escape, effectively silencing genes in human immune cell lines.

Product information

CAS No.	Not available
Chemical Name	YSK12-C4 (YSK12-MEND)
Formula	C43H81NO
M.Wt	628.109353780746
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: 628.109353780746 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	15.921 mL	3.184 mL	1.592 mL
25 mg	39.802 mL	7.960 mL	3.980 mL
50 mg	79.604 mL	15.921 mL	7.960 mL

Mass	1 mM	5 mM	10 mM
100 mg	159.208 mL	31.842 mL	15.921 mL
250 mg	398.020 mL	79.604 mL	39.802 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

Nakamura T, et al. Small-sized, stable lipid nanoparticle for the efficient delivery of siRNA to human immune cell lines. Sci Rep. 2016 Nov 28;6:37849.