

DC71417 | YSK 05

Instructions for Use

YSK 05 is a pH-sensitive cationic lipid. YSK 05 improves the intracellular trafficking of non-viral vectors. YSK 05-MEND shows significantly good gene silencing activity and hemolytic activity. YSK 05 overcomes the suppression of endosomal escape by PEGylation. YSK 05 effectively enhances siRNA delivery both in vitro and in vivo.

Product information

CAS No.	Not available
Chemical Name	YSK 05
Formula	C42H77NO2
M.Wt	628.07
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: 628.07 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	15.922 mL	3.184 mL	1.592 mL
25 mg	39.804 mL	7.961 mL	3.980 mL

Mass	1 mM	5 mM	10 mM
50 mg	79.609 mL	15.922 mL	7.961 mL
100 mg	159.218 mL	31.844 mL	15.922 mL
250 mg	398.045 mL	79.609 mL	39.804 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]. Sato Y, et al. A pH-sensitive cationic lipid facilitates the delivery of liposomal siRNA and gene silencing activity in vitro and in vivo. J Control Release. 2012 Nov 10;163(3):267-76.