

DC72701 | mono-Pal-MTO

Instructions for Use

mono-Pal-MTO is a palm oil-based lipid produced by combining the anticancer drug mitoxantrone (MTO) with palmitoleic acid. When nanoparticles of mono-Pal-MTO and di-Pal-MTO are combined in a molar ratio of 1:1, they show effective siRNA cell delivery and enhance anticancer activity.

Product information

CAS No.	Not available
Chemical Name	mono-Pal-MTO
Formula	C38H56N4O7
M.Wt	680.87
Purity	>98%
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: 680.87 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	14.687 mL	2.937 mL	1.469 mL
25 mg	36.718 mL	7.344 mL	3.672 mL
50 mg	73.435 mL	14.687 mL	7.344 mL

Mass	1 mM	5 mM	10 mM
100 mg	146.871 mL	29.374 mL	14.687 mL
250 mg	367.177 mL	73.435 mL	36.718 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

Not available