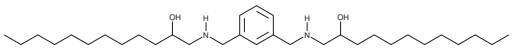
PRODUCT INFORMATION

mXO10

Item No. 45642

CAS Registry No.:	3031520-75-6
Formal Name:	1,1'-((1,3-phenylenebis(methylene))*bis*(azanediyl))*bis*(dodecan-2-ol)
Synonym:	*meta*-XO10
MF:	$C_{32}H_{60}N_2O_2$
FW:	504.8
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

mXO10 is supplied as a solid. A stock solution may be made by dissolving the mXO10 in the solvent of choice, which should be purged with an inert gas. mXO10 is sparingly soluble (1-10 mg/ml) in chloroform.

Description

mXO10 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.[1] LNPs containing mXO10 selectively accumulate in dendritic cells of the spleen in mice after intravenous administration. mXO10-containing LNPs encapsulating mRNA encoding the glioma-associated isocitrate dehydrogenase 1 Arg132His mutation (IDH1 R132H), when administered in combination with an anti-PD-1 antibody, reduce or eradicate tumors in a GL261 orthotopic mouse model of glioma.

Reference

1. Shi, L., Li, Y., Huang, S., *et al.* mRNA vaccine developed for sequential selective organ-to-cell targeting of glioma. *Nat. Commun.* **17(1)**, 687 (2026).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM