

PRODUCT INFORMATION



DMA4-H228

Item No. 43807

CAS Registry No.: 3091917-64-2
Formal Name: ((3,3'-((2-(1-methylpyrrolidin-2-yl) ethyl)azanediyl)bis(propanoyl)) bis(oxy))bis(ethane-2,1-diyl) bis(4-(dioctylamino)-4-oxobutanoate)

MF: C₅₇H₁₀₆N₄O₁₀

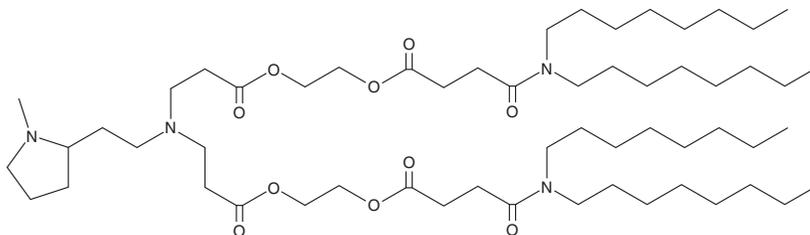
FW: 1,007.5

Purity: ≥95%

Supplied as: A 10 mg/ml solution in ethanol

Storage: -20°C

Stability: ≥2 years



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

Description

DMA4-H228 is an ionizable cationic lipidoid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.¹ LNPs containing DMA4-H228 selectively accumulate in antigen-presenting cells in the spleen in mice. DMA4-H228-containing LNPs encapsulating mRNA encoding ovalbumin induce activation of splenic antigen-presenting cells and increase serum levels of IFN- α in mice. LNPs containing DMA4-H228 and encapsulating mRNA encoding ovalbumin decrease tumor volume and increase intratumoral CD8⁺ T cells and serum anti-ovalbumin IgG titers in a B16/F10-OVA murine melanoma model.

Reference

1. Liang, X., Zhang, C., Yin, Q., *et al.* Dimethylamino-based synthetic lipidoid nanoparticles for selective mRNA delivery to splenic antigen-presenting cells. *J. Control Release* **382**, 113737 (2025).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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