PRODUCT INFORMATION



C12-200

Item No. 36699

CAS Registry No.: 1220890-25-4

Formal Name: 1,1'-[[2-[4-[2-[[2-[bis(2-

> hydroxydodecyl)aminolethyll (2-hydroxydodecyl)amino]ethyl]-1-piperazinyl]ethyl]imino]bis-2-

dodecanol

 $C_{70}H_{145}N_5O_5$ 1,136.9 MF: FW: ≥95% **Purity:**

Supplied as: A 100 mg/ml solution in ethanol

-20°C Storage: Stability: ≥2 years

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



C12-200 is a branched-chain ionizable cationic lipidoid.^{1,2} It has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA, siRNA, or self-amplifying RNA (saRNA). LNPs containing C12-200 and encapsulating an mRNA reporter selectively accumulate in the liver, and to a lesser extent in the spleen and pancreas, in mice. Administration of human erythropoietin (EPO) mRNA or factor VII siRNA in C12-200-containing LNPs increases serum EPO levels and reduces factor VII serum levels, respectively, in mice.

References

- 1. Kauffman, K.J., Dorkin, J.R., Yang, J.H., et al. Optimization of lipid nanoparticle formulations for mRNA delivery in vivo with fractional factorial and definitive screening designs. Nano Lett. 15(11), 7300-7306 (2015).
- 2. Blakney, A.K., McKay, P.F., Yus, B.I., et al. Inside out: Optimization of lipid nanoparticle formulations for exterior complexation and in vivo delivery of saRNA. Gene Ther. 26(9), 363-372 (2019).

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

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.

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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