

PRODUCT INFORMATION



LD003

Item No. 41278

CAS Registry No.: 2102449-40-9
Formal Name: (11 β ,16 α)-9-fluoro-11,17-dihydroxy-16-methyl-21-[4-[(9Z,12Z)-9,12-octadecadien-1-yloxy]-1,4-dioxobutoxy]-pregna-1,4-diene-3,20-dione

MF: C₄₄H₆₅FO₈

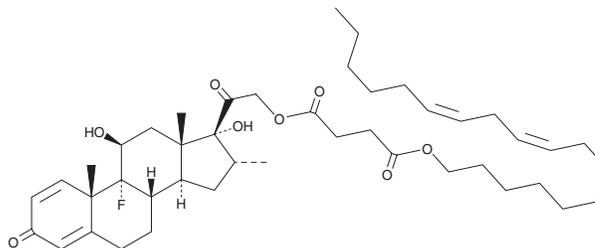
FW: 741.0

Purity: \geq 98%

Supplied as: A 25 mg/ml solution in ethanol

Storage: -20°C

Stability: \geq 1 year



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

Description

LD003 is a lipid prodrug form of the synthetic glucocorticoid dexamethasone (Item No. 11015) that has been used in the formation of lipid nanoparticles (LNPs) for siRNA and mRNA delivery *in vivo*.¹ LNPs containing LD003 and encapsulating cytosine-guanine-containing oligodeoxynucleotide (CpG) reduce the blood levels of IL-10, chemokine (C-X-C motif) ligand 1 (CXCL1), TNF- α , IL-1 β , and IL-6 in mice. LNPs containing LD003 and encapsulating siRNA targeting mouse coagulation Factor VII (FVII) decrease injection site immune infiltration and hepatic levels of FVII in mice.

Reference

1. Chen, S., Zaifman, J., Kulkarni, J.A., *et al.* Dexamethasone prodrugs as potent suppressors of the immunostimulatory effects of lipid nanoparticle formulations of nucleic acids. *J. Control. Release* **286**, 46-54 (2018).

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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