

# PRODUCT INFORMATION



## DOG-IM4

Item No. 37441

CAS Registry No.: 2758097-38-8

Formal Name: N-[(25Z)-14-[(9Z)-9-octadecen-1-yloxy]-3,6,9,12,16-pentaoxatetracont-25-en-1-yl]-1H-imidazole-5-carboxamide

MF:  $C_{51}H_{95}N_3O_7$

FW: 862.3

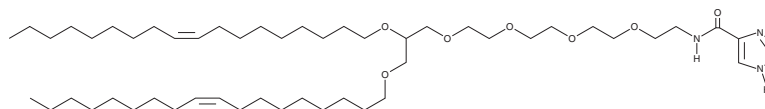
Purity:  $\geq 95\%$

UV/Vis.:  $\lambda_{\max}$ : 232 nm

Supplied as: A 10 mg/ml solution in ethanol

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 2$  years



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

### Description

DOG-IM4 is an ionizable cationic lipid (apparent  $pK_a = 5.6$ ) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA.<sup>1</sup> Immunization with LNPs containing DOG-IM4 and encapsulating mRNA encoding influenza A hemagglutinin (HA) increases HA-inhibiting antibody titers (HI titers) in mice and cynomolgus macaques.

### Reference

1. Ripoll, M., Bernard, M.-C., Vaure, C., *et al.* An imidazole modified lipid confers enhanced mRNA-LNP stability and strong immunization properties in mice and non-human primates. *Biomaterials* **286**, 121570 (2022).

#### 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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