

## DOG-IM4

**Catalog number:** N-1017

**Molecular Formula:** C<sub>53</sub>H<sub>99</sub>N<sub>3</sub>O<sub>8</sub>

**MW:** 906.39

**CAS#:** 2758097-38-8

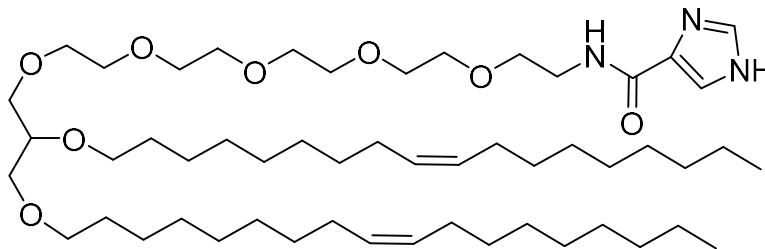
**Alternative Names:** N-((Z)-17-(((Z)-heptadec-8-en-1-yl)oxy)-3,6,9,12,15,19-hexaoxaheptatriacont-28-en-1-yl)-1H-imidazole-4-carboxamide

**Solubility:** ~5 mg/mL in methanol

**Storage and Handling:** Store dry at -20 °C. Stock solution should be stored frozen (-20 °C or below).

**Background:** DOG-IM4 is an ionizable lipid which is used to deliver mRNA by forming lipid nanoparticles (LNPs). DOG-IM4 can improve the thermostability of mRNA/LNP in combination with helper lipids.

**References:** Manon Ripoll, et al “An imidazole modified lipid confers enhanced mRNA-LNP stability and strong immunization properties in mice and non-human primates” *Biomaterials* 2022, 286, 121570.



**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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