

## 80-018

Catalog number: N-1118



Molecular Formula: C<sub>47</sub>H<sub>94</sub>N<sub>2</sub>O<sub>4</sub>

**MW:** 751.28

**CAS#:** 1638334-27-6

Alternative Names: Dioctadecyl 3,3'-((3-(dimethylamino)propyl)azanediyl)dipropionate

Solubility: Chloroform, methanol, ethanol

**Storage and Handling:** Store dry at -20 °C. Stock solutions should be stored at -20 °C or below.

**Background:** 80-O18 is an ionizable lipid used to generate lipid nanoparticles (LNPs) for delivery of proteins. A GFP-Cre recombinase fusion protein encapsulated in 80-O18 LNPs was delivered to the cytosol of HeLa-HGM cells. Cytosolic delivery was measured by a chloroalkane penetration assay.

**References:** Jing Wang, Shiying Zhang, Yamin Li, Qiaobing Xu, and Joshua A. Kritzer (2024) "Investigating the Cytosolic Delivery of Proteins by Lipid Nanoparticles Using the Chloroalkane Penetration Assay *Biochemistry* 63(4), 512-522, DOI: 10.1021/acs.biochem.3c00614

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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Technical Data Sheet, Rev 1, 5/28/2024 - For research use only. Not intended for diagnostic or therapeutic use.



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