

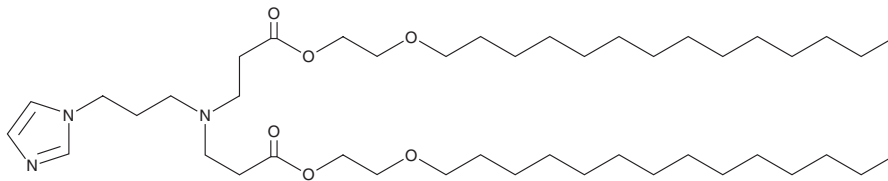
PRODUCT INFORMATION



93-O170

Item No. 34366

CAS Registry No.: 2227214-78-8
Formal Name: bis(2-(tetradecyloxy)ethyl) 3,3'-((3-(1H-imidazol-1-yl) propyl)azanediyl)dipropionate
MF: C₄₄H₈₃N₃O₆
FW: 750.2
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

93-O170 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. 93-O170 is soluble in the organic solvent chloroform at a concentration of approximately 25 mg/ml.

Description

93-O170 is a chalcogen-containing ionizable cationic lipidoid.^{1,2} It has been used in the generation of lipid nanoparticles (LNPs). LNPs containing 93-O170 localize to the spleen after intravenous injection into mice.¹ LNPs containing 93-O170 have been used for the delivery of Cre recombinase and ribonucleoproteins for genome editing in mice and for the intratumoral delivery of cGAMP to enhance cross-presentation of tumor antigens.^{2,3}

References

1. Zhao, X., Chen, J., Qiu, M., *et al.* Imidazole-based synthetic lipidoids for in vivo mRNA delivery into primary T lymphocytes. *Angew Chem. Int. Ed. Engl.* **59**(45), 20083-20089 (2020).
2. Chen, J., Qiu, M., Ye, Z., *et al.* In situ cancer vaccination using lipidoid nanoparticles. *Sci. Adv.* **7**(19), eabf1244 (2021).
3. Li, Y., Yang, T., Yu, Y., *et al.* Combinatorial library of chalcogen-containing lipidoids for intracellular delivery of genome-editing proteins. *Biomaterials* **178**, 652-662 (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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