

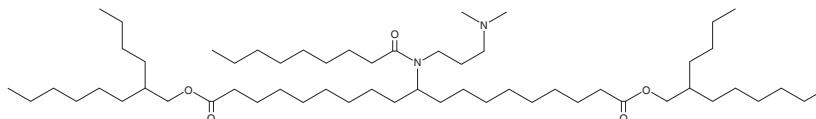
PRODUCT INFORMATION



Lipid A9

Item No. 37667

CAS Registry No.: 2036272-50-9
Formal Name: bis(2-butyloctyl) 10-(N-(3-(dimethylamino)propyl)nonanamido)nonadecanedioate
MF: C₅₇H₁₁₂N₂O₅
FW: 905.5
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Lipid A9 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. Lipid A9 is soluble in chloroform.

Description

Lipid A9 is an ionizable cationic lipid ($pK_a = 6.27$) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA and siRNA *in vivo*.^{1,2} LNPs containing lipid A9 and encapsulating non-stimulatory siRNA increase plasma levels of chemokine (C-C motif) ligand 2 (CCL2), indicating activation of the innate immune response, and decrease body weight in mice.²

References

1. Buschmann, M.D., Carrasco, M.J., Alishetty, S., *et al.* Nanomaterial delivery systems for mRNA vaccines. *Vaccines (Basel)* **9(1)**, 65 (2021).
2. Holland, R., Lam, K., Jeng, S., *et al.* Silicon ether ionizable lipids enable potent mRNA lipid nanoparticles with rapid tissue clearance. *ACS Nano* **18(15)**, 10374-10387 (2024).

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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