PRODUCT INFORMATION



DLin-DMA

Item No. 36701

CAS Registry No.:	871258-12-7		
Formal Name:	N,N-dimethyl-2,3-bis[(9Z,12Z)-		
	9,12-octadecadien-1-yloxy]-1- propanamine		 _N_
Synonym:	1,2-Dilinoleyloxy-N,N-dimethyl-3	-	
	aminopropane		
MF:	C ₄₁ H ₇₇ NO ₂		\frown_{0}
FW:	616.1		-
Purity:	≥95%	$\land \land \land - \land - \land \land \land$	\sim
Supplied as:	A solution in ethanol		\sim \sim
Storage:	-20°C		
Stability:	≥2 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.			

Laboratory Procedures

DLin-DMA 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. Solvents such as ethanol and dimethyl formamide purged with an inert gas can be used. The solubility of DLin-DMA in these solvents is approximately 10 and 2 mg/ml, respectively.

Description

DLin-DMA is an ionizable cationic amino lipid ($pK_a = 6.7$) that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs) for the delivery of nucleic acids^{1,2}

References

- 1. Heyes, J., Palmer, L., Bremner, K., et al. Cationic lipid saturation influences intracellular delivery of encapsulated nucleic acids. J. Control Release 107(2), 276-287 (2005).
- 2. Kuboyama, T., Yagi, K., Naoi, T., et al. Simplifying the chemical structure of cationic lipids for siRNA-lipid nanoparticles. ACS Med. Chem. Lett. 10(5), 749-753 (2019).

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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