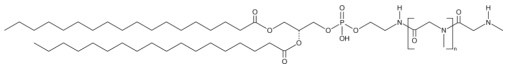
Product Data Sheet

Product Name: DSPE-Polysarcosine50
Cat. No.: GC91873

Chemical Properties

Cas. No.			
Chemical Name	(2R)-3-((hydroxy(2-(2-(N-methyl-2-(methylamino)acetamido)acetamido)ethoxy)phosphoryl)oxy)propane-1,2-diyl distearate		
SMILES	CCCCCCCCCCCCCCCCCC(OC[C@H](COP(O)(OCCNC(CN(C)C(CNC)=O)=O)=O)OC(CCCCCCCCCCCCCCCCC)=O)=O		
Formula	$(C_3H_5NO)nC_{44}H_{87}N_2O_9P$	M.Wt	
Solubility	Chloroform: Soluble	Storage	-20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

DSPE-polysarcosine50 is an amine-functionalized hydrophilic polymer.[1] It is a polysarcosine-labeled form of 1,2-distearoyl-*rac*-glycero-3-PE (DSPE). Polysarcosines have been used as alternatives to PEGylation in lipid nanoparticles (LNPs) and to reduce the immunogenicity of administered proteins *in vivo*.[1,2]

References:
[1]. Nogueira, S.S., Schlegel, A., Maxeiner, K., et al.Polysarcosine-functionalized lipid nanoparticles for therapeutic mRNA deliveryACS Appl. Nano Mater.3(11)10634-10645(2020).
[2]. Hu, Y., Hou, Y., Wang, H., et al.Polysarcosine as an alternative to PEG for therapeutic protein conjugationBioconjug. Chem.29(7)2232-2238(2018).

Caution: Product has not been fully validated for medical applications. For research use only.
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