

Cat. No.: GC91879

Cas. No.

Chemical Name	(2R)-3-((hydroxy(2-(2-(N-methyl-2-(methylamino)acetamido)acetamido)ethoxy)phosphoryl)oxy)propane-1,2-diyl distearate
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SMILES CCCCCCCCCCCCCCCC(OC[C@H](COP(O)(OCCNC(CN(C)C(CNC)=O)=O)=O)OC(CCCCCCCCCCCCCCCC)=O)=O

Formula	(C ₃ H ₅ NO) _n C ₄₄ H ₈₇ N ₂ O ₉ P	M.Wt
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Solubility	Chloroform: soluble,Methanol: soluble	Storage	-20°C
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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.
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Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.
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Structure

The chemical structure shows a phospholipid molecule. It consists of two long, straight hydrocarbon chains (fatty acids) attached to a glycerol backbone. The glycerol backbone is linked to a phosphate group, which is further connected to a polyamine head group. The polyamine head group is represented by a repeating unit in brackets, indicating a polymer chain. The structure is drawn in a skeletal format, showing the carbon chains and the functional groups.

DSPE-Polysarcosine150 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}

[1]. Nogueira, S.S., Schlegel, A., Maxeiner, K., et al. Polysarcosine-functionalized lipid nanoparticles for therapeutic mRNA delivery *ACS 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 conjugation *Bioconjug. Chem.* 29(7)2232-2238(2018).

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

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