

PRODUCT INFORMATION



DSPE-Polysarcosine20

Item No. 39042

Formal Name: (2R)-3-((hydroxy(2-(2-(N-methyl-2-(methylamino)acetamido)acetamido)ethoxy)phosphoryl)oxy)propane-1,2-diyl distearate

Synonyms: 1,2-Dioctadecanoyl-*sn*-glycero-3-Phosphoethanolamine-Polysarcosine20, 1,2-Distearoyl-*sn*-glycero-3-PE Polysarcosine20, 1,2-Dioctadecanoyl-*sn*-glycero-3-Phosphoethanolamine-Polysarcosine20, 1,2-DSPE-Polysarcosine20, DSPE-pSar₂₀, 18:0/18:0-PE-Polysarcosine20, PE(18:0/18:0)-Polysarcosine20

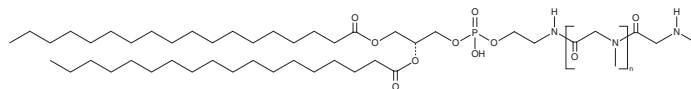
MF: (C₃H₅NO)_nC₄₄H₈₇N₂O₉P

Purity: ≥90%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

DSPE-polysarcosine20 is supplied as a solid. A stock solution may be made by dissolving the DSPE-polysarcosine20 in the solvent of choice, which should be purged with an inert gas. DSPE-polysarcosine20 is soluble in chloroform.

Description

DSPE-polysarcosine20 is an amine-functionalized hydrophilic polymer. It is a polysarcosine-labeled form of 1,2-distearoyl-*rac*-glycero-3-phosphoethanolamine (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 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).

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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