

# PRODUCT INFORMATION



## DSPE-Polysarcosine150

Item No. 39045

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

**Synonyms:** 1,2-Distearoyl-*rac*-glycero-3-PE-Polysarcosine150, 1,2-Distearoyl-*rac*-glycero-3-Phosphatidylethanolamine-Polysarcosine150, 1,2-Distearoyl-*rac*-glycero-3-Phosphoethanolamine-Polysarcosine150, 1,2-DSPE-Polysarcosine150, DSPE-pSar<sub>150</sub>

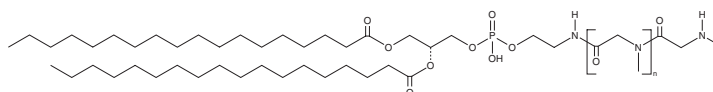
**MF:** (C<sub>3</sub>H<sub>5</sub>NO)<sub>n</sub>C<sub>44</sub>H<sub>87</sub>N<sub>2</sub>O<sub>9</sub>P

**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-polysarcosine150 is supplied as a solid. A stock solution may be made by dissolving the DSPE-polysarcosine150 in the solvent of choice, which should be purged with an inert gas. DSPE-polysarcosine150 is soluble in organic solvents such as chloroform and methanol.

### Description

DSPE-Polysarcosine150 is an amine-functionalized, hydrophilic polymer.<sup>1</sup> 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*.<sup>1,2</sup>

### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/08/2024

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM