

PRODUCT INFORMATION



DSG-mPEG(2000)

Item No. 37800

CAS Registry No.: 308805-39-2

Formal Name: α -[2,3-bis[(1-oxooctadecyl)oxy]propyl]- ω -methoxy-poly(oxy-1,2-ethanediyl)

Synonym: 1,2-Distearoyl-*rac*-glycero-3-methylpolyoxyethylene

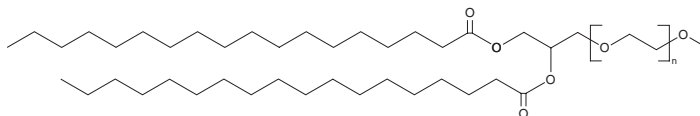
MF: $(C_{2}H_{4}O)_n C_{40}H_{78}O_5$

Purity: $\geq 95\%$

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

DSG-mPEG(2000) is supplied as a solid. A stock solution may be made by dissolving the DSG-mPEG(2000) in the solvent of choice, which should be purged with an inert gas. DSG-mPEG(2000) is soluble in the organic solvent chloroform at a concentration of approximately 30 mg/ml.

Description

DSG-mPEG(2000) is a PEGylated derivative of 1,2-distearoyl-*sn*-glycerol (DSG; Item No. 15079).¹ It has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs). LNPs containing DSG-mPEG(2000) and encapsulating a toll-like receptor 7 (TLR7) and TLR8 agonist and a peptide antigen each conjugated to poly(L-glutamic acid) (PGA) increase the activation of dendritic cells, macrophages, and B cells in the draining lymph node and dendritic cells and B cells in the spleen in mice compared to the non-LNP-encapsulated PGA-conjugated TLR7/8 agonist and peptide antigen.

Reference

1. Van Lysebetten, D., Malfanti, A., Deswarte, K., *et al.* Lipid-polyglutamate nanoparticle vaccine platform. *ACS Appl. Mater. Interfaces* **13**(5), 6011-6022 (2021).

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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