

PRODUCT INFORMATION

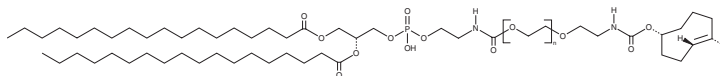


DSPE-PEG(2000)-TCO (axial)

Item No. 45526

Formal Name: (2R)-3-((((1-(((R,E)-cyclooct-4-en-1-yl)oxy)-1,9-dioxo-5,8-dioxo-2,10-diazadodecan-12-yl)oxy)(hydroxy)phosphoryl)oxy)propane-1,2-diyl distearate

Synonyms: 1,2-Distearoyl-*sn*-glycero-3-PE-Polyethylene Glycol-2000-*trans*-cyclooctene (axial), 1,2-Distearoyl-*sn*-glycero-3-Phosphoethanolamine-Polyethylene Glycol-2000-*trans*-cyclooctene (axial)



MF: $(C_2H_4O)_n C_{53}H_{99}N_2O_{12}P$

Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years

Item Origin: Synthetic

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

Laboratory Procedures

DSPE-PEG(2000)-TCO (axial) is supplied as a solid. A stock solution may be made by dissolving the DSPE-PEG(2000)-TCO (axial) in the solvent of choice, which should be purged with an inert gas. DSPE-PEG(2000)-TCO (axial) is soluble (≥ 10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

DSPE-PEG(2000)-TCO (axial) is a more reactive form of DSPE-PEG(2000)-TCO in which the TCO moiety is in the axial conformation, which increases its reactivity.¹ DSPE-PEG(2000)-TCO (axial) can be used for bioorthogonal ligation of lipid nanoparticles (LNPs).²

References

1. Pigga, J.E., Rosenberger, J.E., Jemas, A., *et al.* General, divergent platform for diastereoselective synthesis of *trans*-cyclooctenes with high reactivity and favorable physiochemical properties. *Angew. Chem. Int. Ed. Engl.* **60**(27), 14975-14980 (2021).
2. Marqués-Gallego, P. and de Kroon, A.I. Ligation strategies for targeting liposomal nanocarriers. *Biomed. Res. Int.* 129458 (2014).

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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