

PRODUCT INFORMATION



DSPE-PEG(2000)-COOH

Item No. 42164

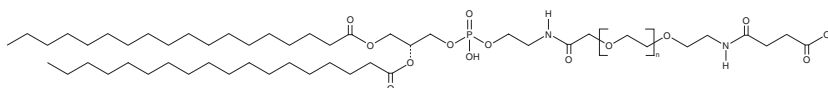
Formal Name: α -[(9R)-6-hydroxy-6-oxo-1,12-dioxo-9-[[1-oxooctadecyl]oxy]-5,7,11-trioxa-2-aza-6-phosphanacosa-1-yl]- ω -[2-[(3-carboxy-1-oxopropyl)amino]ethoxy]-poly(oxy-1,2-ethanediyl)

MF: $(C_2H_4O)_n C_{49}H_{93}N_2O_{13}P$
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

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

Description

DSPE-PEG(2000)-COOH is a PEGylated derivative of 1,2-distearoyl-*sn*-glycero-3-PE (DSPE; Item No. 15095). It has been used to link transferrin receptors to the surface of liposomes encapsulating doxorubicin (Item No. 15007) for targeted delivery of doxorubicin *in vitro* and *in vivo*.¹ Nanomicelles containing DSPE-PEG(2000)-COOH linked to borneol and encapsulating doxorubicin reduce tumor growth and metastasis in an *in situ* C6 mouse model of glioblastoma.²

References

1. Li, X., Ding, L., Xu, Y., *et al.* Targeted delivery of doxorubicin using stealth liposomes modified with transferrin. *Int. J. Pharm.* **373**(1-2), 116-123 (2009).
2. Meng, L., Chu, X., Xing, H., *et al.* Improving glioblastoma therapeutic outcomes via doxorubicin-loaded nanomicelles modified with borneol. *Int. J. Pharm.* **567**, 118485 (2019).

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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