

PRODUCT INFORMATION



1,2-Dioleoyl-*sn*-glycero-3-N-carboxyfluorescein-PE

Item No. 26015

CAS Registry No.: 384832-91-1
Formal Name: 9Z-octadecenoic acid, 1,1'-[(1R)-1-[8-(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)-3-hydroxy-3-oxido-8-oxo-2,4-dioxo-7-aza-3-phosphaoct-1-yl]-1,2-ethanediyl] ester, diammonium salt

Synonyms: 1,2-Dioleoyl-*sn*-glycero-3-phosphoethanolamine N-carboxyfluorescein, 18:1 PE CF

MF: C₆₂H₈₈NO₁₄P • 2NH₃

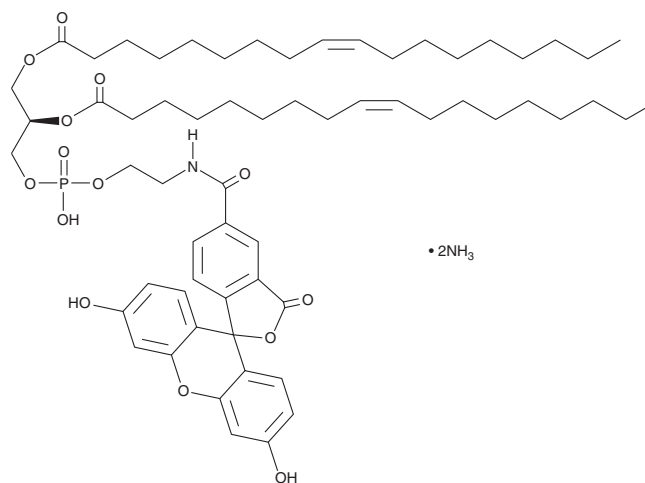
FW: 1,136.4

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

1,2-Dioleoyl-*sn*-glycero-3-N-carboxyfluorescein-PE (DOPE-CF) is supplied as a solid. A stock solution may be made by dissolving the DOPE-CF in the solvent of choice. DOPE-CF is soluble in the organic solvent chloroform, which should be purged with an inert gas, at a concentration of approximately 3.3 mg/ml.

Description

DOPE-CF is a synthetic phosphoethanolamine that contains a fluorescent 6-carboxyfluorescein (Item No. 21233) moiety.¹ It has been used in the study of liposome membrane dynamics using spectrophotometry and FRET.^{1,2} DOPE-CF has also been used in the synthesis of IL-10-targeted PEGylated liposomes and silica microsphere supported lipid bilayers (μ SLBs) for detection in fluorescence microscopy and flow cytometry, respectively.^{3,4}

References

1. Davydov, D.A., Yaroslavova, E.G., Rakhnyanskaya, A.A., *et al.* Polymer migration among phospholipid liposomes. *Langmuir* **25(23)**, 13528-13533 (2009).
2. Buranda, T., Wu, Y., Perez, D., *et al.* Real-time partitioning of octadecyl rhodamine B into bead-supported lipid bilayer membranes revealing quantitative differences in saturable binding sites in DOPC and 1:1:1 DOPC/SM/cholesterol membranes. *J. Phys. Chem. B* **114(3)**, 1336-1349 (2010).
3. Almer, G., Frascione, D., Pali-Schöll, I., *et al.* Interleukin-10: An anti-inflammatory marker to target atherosclerotic lesions via PEGylated liposomes. *Mol. Pharm.* **10(1)**, 175-186 (2013).
4. Fabry-Wood, A., Fetrow, M.E., Brown, C.W.I., *et al.* A microsphere-supported lipid bilayer platform for DNA reactions on a fluid surface. *ACS Appl Mater Interfaces* **9(35)**, 30185-30195 (2017).

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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