

PRODUCT INFORMATION



NBD-PE

Item No. 45712

CAS Registry No.: 178119-00-1

Formal Name: hexadecanoic acid, 1,1'-[[[(1R)-1-[[[hydroxy[2-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]ethoxy]phosphinyl]oxy]methyl]-1,2-ethanediyl]ester, compd. with N,N-diethylethanamine (1:1)

Synonyms: NBD-1,2-dipalmitoyl-*sn*-glycero-3-phosphoethanolamine, NBD-PtdEtn

MF: $C_{43}H_{75}N_4O_{11}P \cdot C_6H_{15}N$

FW: 956.3

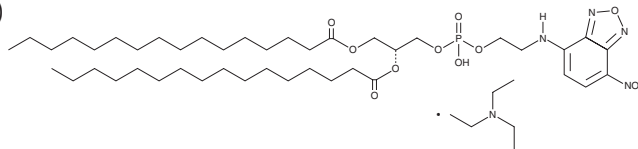
Purity: $\geq 95\%$

Ex./Em.: ~460/525 nm

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

NBD-PE is supplied as a solid. A stock solution may be made by dissolving the NBD-PE in the solvent of choice, which should be purged with an inert gas. NBD-PE is slightly soluble (0.1-1 mg/ml) in methanol.

Description

NBD-PE is a fluorescently tagged phosphatidylethanolamine containing palmitic acid (Item Nos. 10006627 | 43561) at the *sn*-1 and *sn*-2 positions. NBD-PE displays excitation/emission maxima of ~460/525 nm, respectively, in ethanol.¹ It has been incorporated into plasma and mitochondrial membranes and liposomes, used to study lipid rafts, and used as a substrate in phospholipidosis assays.¹⁻³

References

1. Monti, J.A., Christian, S.T., and Shaw, W.A. Synthesis and properties of a highly fluorescent derivative of phosphatidylethanolamine. *J. Lipid Res.* **19(2)**, 222-228 (1978).
2. de Almeida, R.F.M., Loura, L.M.S., Fedorov, A., *et al.* Lipid rafts have different sizes depending on membrane composition: A time-resolved fluorescence resonance energy transfer study. *J. Mol. Biol.* **346(4)**, 1109-1120 (2005).
3. Bhandari, N., Figueroa, D.J., Lawrence, J.W., *et al.* Phospholipidosis assay in HepG2 cells and rat or rhesus hepatocytes using phospholipid probe NBD-PE. *Assay Drug. Dev. Technol.* **6(3)**, 407-419 (2008).

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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