

PRODUCT INFORMATION



PtdIns-(3,4,5)-P₃-fluorescein (triethylammonium salt)

Item No. 10010383

Formal Name: 1-(1-octadecanoyl-fluorescein-2R-octanoylphosphatidyl)

Synonyms: inositol-3,4,5-trisphosphate, heptatriethylammonium salt
DOPI-3,4,5-P₃-fluorescein, Phosphatidylinositol-3,4,5-triphosphate C-8-fluorescein, PI(3,4,5)P₃-fluorescein, PIP3[3',4',5']-fluorescein

MF: C₄₆H₅₄NO₂₈P₄ • 7C₆H₁₆N

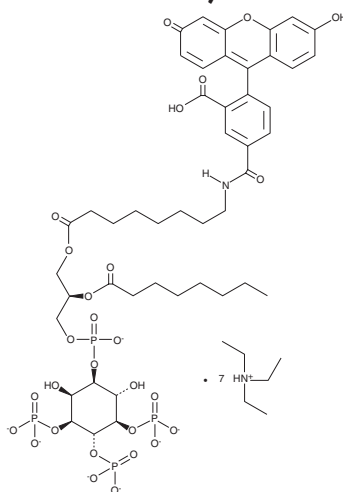
FW: 1,908.2

Purity: ≥90%

Supplied as: A lyophilized powder

Storage: -20°C

Stability: ≥5 years



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

Laboratory Procedures

PtdIns-(3,4,5)-P₃-fluorescein (triethylammonium salt) is supplied as a lyophilized powder. The solubility of PtdIns-(3,4,5)-P₃-fluorescein (triethylammonium salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The phosphatidylinositols (PtdIns) phosphates represent a small percentage of total membrane phospholipids. However, they play a critical role in the generation and transmission of cellular signals.^{1,2} PtdIns-(4,5)-P₂ can be phosphorylated by phosphatidylinositol (PI)-3-kinase to make PtdIns-(3,4,5)-P₃, which initiates an intricate signaling cascade that has been implicated in cancer.³ PtdIns-(3,4,5)-P₃-fluorescein is a fluorescent probe for any protein with a high affinity binding interaction with inositol-(3,4,5)-triphosphate phospholipids, such as PI-3-kinase, PTEN, or PH-domain-containing proteins.

References

1. Exton, J.H. Regulation of phosphoinositide phospholipases by hormones, neurotransmitters, and other agonists linked to G proteins. *Annu. Rev. Pharmacol. Toxicol.* **36**, 481-509 (1996).
2. Majerus, P.W. Inositol phosphate biochemistry. *Annu. Rev. Biochem.* **61**, 225-250 (1992).
3. Vivanco, I. and Sawyers, C.L. The phosphatidylinositol 3-kinase-AKT pathway in human cancer. *Nature Reviews Cancer* **2**, 489-501 (2002).

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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