

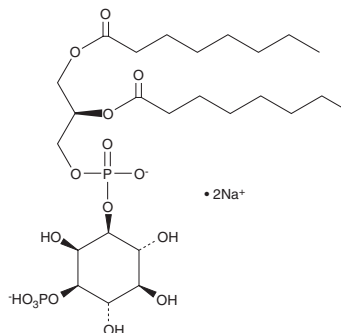
PRODUCT INFORMATION



PtdIns-(3)-P₁ (1,2-dioctanoyl) (sodium salt)

Item No. 10008394

CAS Registry No.: 299216-98-1
Formal Name: 1-(1,2-dioctanoylphosphatidyl) inositol-3-phosphate, disodium salt
Synonyms: DOPI-3-P₁, Phosphatidylinositol-3-monophosphate C-8, PI(3)P (8:0/8:0), PIP[3'](8:0/8:0)
MF: C₂₅H₄₆O₁₆P₂ • 2Na
FW: 710.6
Purity: ≥98%
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)-P₁ (1,2-dioctanoyl) (sodium salt) is supplied as a lyophilized powder. PtdIns-(3)-P₁ (1,2-dioctanoyl) (sodium salt) is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of PtdIns-(3)-P₁ (1,2-dioctanoyl) (sodium salt) be prepared by directly dissolving the lyophilized powder in aqueous buffers. The solubility of PtdIns-(3)-P₁ (1,2-dioctanoyl) (sodium salt) in water is approximately 50 mg/ml.

Description

The phosphatidylinositol (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-(3)-P₁ (1,2-dioctanoyl) is a synthetic analog of natural PtdIns featuring C8:0 fatty acids at the *sn*-1 and *sn*-2 positions. The compound features the same inositol and DAG stereochemistry as the natural compound. PtdIns-(3)-P₁ can be phosphorylated to di- (PtdIns-P₂; PIP₂) and triphosphates (PtdIns-P₃; PIP₃) by phosphatidylinositol (PI)-specific kinases.

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).

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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