

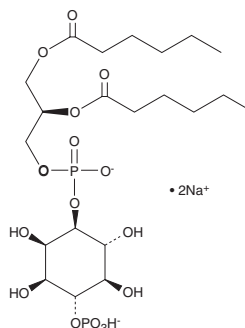
PRODUCT INFORMATION



PtdIns-(4)-P₁ (1,2-dihexanoyl) (sodium salt)

Item No. 10007757

Formal Name:	1-(1,2-dihexanoylphosphatidyl) inositol-4-phosphate, disodium salt
Synonyms:	DHPI-4-P ₁ , Phosphatidylinositol-4-phosphate C-6, PI(4)P (6:0/6:0), PIP[4'](6:0/6:0)
MF:	C ₂₁ H ₃₈ O ₁₆ P ₂ • 2Na
FW:	654.5
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.

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-(4)-P₁ (1,2-dihexanoyl) is a synthetic analog of natural PtdIns featuring C6:0 fatty acids at the *sn*-1 and *sn*-2 positions. The compound features the same inositol and diacylglycerol (DAG) stereochemistry as that of the natural compound. PtdIns-(4)-P₁ can be phosphorylated to di- (PtdIns-P₂; PIP₂) and triphosphates (PtdIns-P₃; PIP₃) by phosphoinositol (PI)-specific kinases. Hydrolysis of PtdIns-(4,5)-P₂ by PI-specific phospholipase C generates inositol triphosphate (IP₃) and DAG which are key second messengers in an intricate biochemical signal transduction cascade.

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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