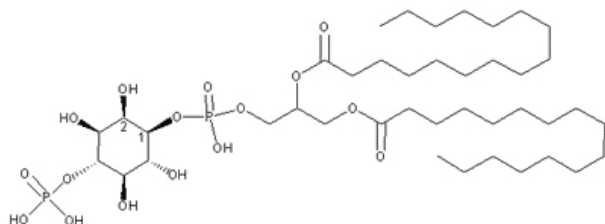


PI-4-P synthetic

L- α -Phosphatidylinositol-4-phosphate synthetic

Cat. No.	Amount
LI-009	100 μ g



For *in vitro* use only
 Quality guaranteed for 12 months
 Store at -20°C

Form
 Lyophilized.

Solubility
 Soluble in water.

Molecular Formula
 $C_{41}H_{80}O_{16}P_2$.

Molecular Weight
 891.01 g/mol

Purity
 $\geq 98\%$

Description

Phosphatidylinositol-4-phosphat is one of the *in vitro* substrates for PI3-kinases. Phosphatidylinositol 3 kinase is a lipid kinase that phosphorylates the inositol ring of phosphatidylinositol-4-phosphate and related compounds at the 3'-OH position.

PIP can be used as a substrate for PI3K lipid kinase activity assay together with a mix of PI, PIP₂, PC, PE, PS and SM. Di-C18PtdIns(4)P contains two chains of the 18:0 saturated fatty acid Octadecanoic Acid (common name: stearic acid).

Selected References:

- Vanhaesebroeck *et al.* (2001) Synthesis and function of 3-phosphorylated inositol lipids. *Ann. Rev. Biochem.* **70**:535.
 Balla (2001) Pharmacology of phosphoinositides, regulators of multiple cellular functions. *Curr. Pharm. Des.* **7**:475.
 Wymann (2003) Phosphoinositide 3-kinase signalling – which way to target? *Trend Pharmacol. Sci.* **24**:323.
 Foukas *et al.* (2002) Direct effects of caffeine and theophylline on p110 delta and other phosphoinositide 3-kinases. Differential effects on lipid kinase and protein kinase activities. *J. Biol. Chem.* **277**:37124.