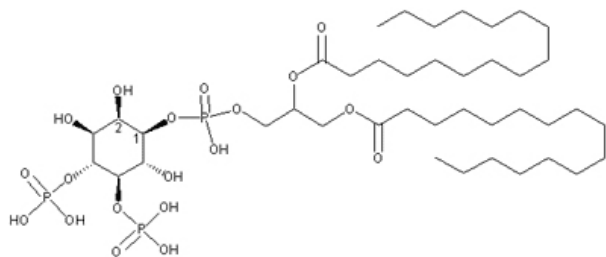


PI-4,5-P₂ synthetic

L- α -Phosphatidylinositol-4,5-bisphosphate synthetic

Cat. No.	Amount
LI-010	100 μ g



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

Form
 Lyophilized.

Solubility
 Soluble in water.

Molecular Formula
 $C_{41}H_{81}NO_{19}P_3$.

Molecular Weight
 970.99 g/mol

Purity
 $\geq 98\%$

Description

Phosphatidylinositol-4,5-bisphosphate is one of the *in vitro* substrates for PI3-kinases and their *in vivo* substrate. Phosphatidylinositol 3-kinase is a lipid kinase that phosphorylates the inositol ring of phosphatidylinositol and related compounds at the 3' OH position.

PIP₂ can be used as a substrate for PI3K lipid kinase activity assay together with a mix of PI, PIP, PC, PE, PS and SM.

Di-C18PtdIns(4,5)P₂ 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.