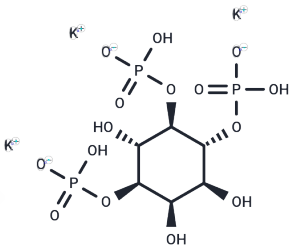
Data Sheet (Cat.No.T35934)

TargetMol

D-myo-Inositol-1,4,5-triphosphate tripotassium

Chemical Properties



CAS No. : 141611-11-2

Formula: C6H12K3O15P3

Molecular Weight: 534.37

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	D-myo-Inositol-1,4,5-triphosphate tripotassium (Ins(1,4,5)-P3 tripotassium) is a second messenger in cellular signal transduction that triggers Ca2+ mobilization.
Targets(IC50)	Calcium Channel
In vitro	D-myo-Inositol-1,4,5-triphosphate tripotassium inhibits phosphatidylinositol-specific phospholipase C-delta 1 (PLC-delta 1) and phosphatidylcholine (PC) and phosphatidylinositol 4, 5-diphosphate (PIP2) consists of a combination of bilayer membranes. [1]

Solubility Information

Solubility	PBS (pH 7.2): >50 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	PBS: 30 mg/mL (56.14 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8714 mL	9.3568 mL	18.7136 mL
5 mM	0.3743 mL	1.8714 mL	3.7427 mL
10 mM	0.1871 mL	0.9357 mL	1.8714 mL
50 mM	0.0374 mL	0.1871 mL	0.3743 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Gou DM, et al. D-myo-inositol 1,4,5-trisphosphate analogues as useful tools in biochemical studies of intracellular calcium mobilization. Bioorg Med Chem. 1994 Jan;2(1):7-13.
Cifuentes ME, et al. D-myo-inositol 1,4,5-trisphosphate inhibits binding of phospholipase C-delta 1 to bilayer membranes. J Biol Chem. 1994 Jan 21;269(3):1945-8.