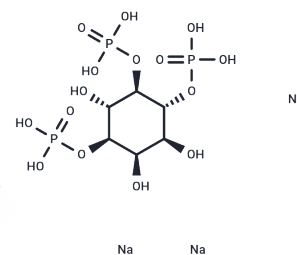


D-myo-Inositol-1,4,5-triphosphate trisodium

Chemical Properties

CAS No. :	141611-10-1
Formula:	C ₆ H ₁₅ Na ₃ O ₁₅ P ₃
Molecular Weight:	489.06
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	D-myo-Inositol-1,4,5-triphosphate trisodium (Inositol 1,4,5-triphosphate trisodium) is a second messenger produced in cells by the phospholipase C-mediated hydrolysis of phosphatidylinositol-4,5-bisphosphate. It binds to Ins(1,4,5)P ₃ receptors, resulting in the opening of calcium channels and an increase in intracellular calcium.
Targets(IC50)	Others, Calcium Channel
In vitro	The dissociation constant (KD) for D-myo-Inositol-1,4,5-triphosphate (As an inositol phosphate derivative) complexed with Pr55Gag is 2170 μM. The binding affinities of D-myo-Inositol-1,4,5-triphosphate for matrix (MA) with KD=568 μM.[4]

Solubility Information

Solubility	PBS (pH 7.2): 50 mg/mL (102.24 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0447 mL	10.2237 mL	20.4474 mL
5 mM	0.4089 mL	2.0447 mL	4.0895 mL
10 mM	0.2045 mL	1.0224 mL	2.0447 mL
50 mM	0.0409 mL	0.2045 mL	0.4089 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

Streb H, et al. Release of Ca²⁺ from a nonmitochondrial intracellular store in pancreatic acinar cells by inositol-1,4,5-trisphosphate. *Nature*. 1983;306(5938):67-69.

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Anraku K, et al. Highly sensitive analysis of the interaction between HIV-1 Gag and phosphoinositide derivatives based on surface plasmon resonance. *Biochemistry*. 2010;49(25):5109-5116.

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