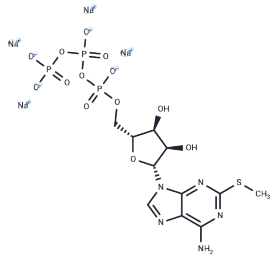
Data Sheet (Cat.No.T22496)

TargetMol

2-Methylthio-ATP tetrasodium

Chemical Properties



CAS No. : 100020-57-3

Formula: C11H14N5Na4O13P3S

Molecular Weight: 641.2

Storage: Keep away from moisture
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	2-Methylthio-ATP tetrasodium (2-MeS-ATP tetrasodium) is a non-specific P2 receptor agonist, which can activate P2X2 and P2Y1 receptors and mimic the physiological effects of ATP by binding to P2 receptors, and is widely used in the study of cell signaling and metabolic processes. In addition, 2-Methylthio-ATP tetrasodium induces non-competitive inhibition of ADP-induced platelet aggregation in human.
Targets(IC50)	Others,P2X Receptor,P2Y Receptor
In vitro	2-Methylthio-ATP tetrasodium is a very potent P2y-purine agonist that maximally activates glycogen phosphorylase at 20 nM in rat hepatocytes.[1]

Solubility Information

Solubility	H2O: 40 mg/mL (62.38 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5596 mL	7.7979 mL	15.5958 mL
5 mM	0.3119 mL	1.5596 mL	3.1192 mL
10 mM	0.156 mL	0.7798 mL	1.5596 mL
50 mM	0.0312 mL	0.156 mL	0.3119 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

Keppens S,et al. Characterization of the biological effects of 2-methylthio-ATP on rat hepatocytes: clear-cut differences with ATP. Br J Pharmacol. 1991 Oct;104(2):301-4.

Tomé AR,et al. Selective stimulation of catecholamine release from bovine adrenal chromaffin cells by an ionotropic purinergic receptor sensitive to 2-methylthio ATP. BMC Neurosci. 2007 Jun 20;8:41.

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