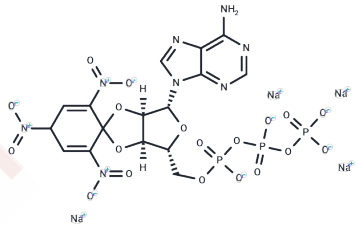
Data Sheet (Cat.No.T83802)

TargetMol

TNP-ATP sodium

Chemical Properties



CAS No. :

Formula: C16H13N8O19P3.4Na

Molecular Weight: 806.20

Storage: Keep away from direct sunlight
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	TNP-ATP, a derivative of ATP, acts as an antagonist to the purinergic P2Y1, P2X3, and P2X2/3 receptors, demonstrating selectivity by showing lower inhibitory concentrations (IC50 = 6, 0.9, 7 nM, respectively) compared to the P2X2, P2X4, and P2X7 receptors (IC50 = 2, 15.2, >30 μM, respectively) in HEK293 cells expressing these human receptors. It effectively diminishes acetic acid-induced calcium influx in 1321N1 cells targeting P2X3 and P2X2/3 receptors (IC50 = 100 and 62 nM, respectively) and alleviates pain in a mouse model of visceral pain (ED50 = 6.35 μmol/kg). Moreover, TNP-ATP exhibits a notable fluorescence characteristic, with an emission peak at 547 nm after excitation at 403 nm, which enhances four-fold and shifts to 538 nm when bound to the insulin-degrading enzyme (IDE).
Targets(IC50)	Others

Solubility Information

Solubility	H2O: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2404 mL	6.2019 mL	12.4039 mL
5 mM	0.2481 mL	1.2404 mL	2.4808 mL
10 mM	0.124 mL	0.6202 mL	1.2404 mL
50 mM	0.0248 mL	0.124 mL	0.2481 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.