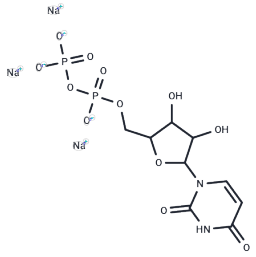
Data Sheet (Cat.No.T13264)

TargetMol

Uridine 5'-diphosphate sodium salt

Chemical Properties



CAS No. : 21931-53-3

Formula: C9H11N2Na3O12P2

Molecular Weight: 470.106

Storage: 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	Uridine 5'-diphosphate sodium salt is a selective native agonist of the P2Y6 receptor (EC50: 300 nM; pEC50: 6.52) and a potent antagonist of P2Y14 (pEC50: 7.28).
Targets(IC50)	Others,Endogenous Metabolite,DNA/RNA Synthesis,P2Y Receptor
In vitro	microglial CCL2 and CCL3 mRNA expression significantly induced by Uridine 5'-diphosphate sodium salt (100 μM; for 15 min)[2]. Uridine 5'-diphosphate sodium salt (100 μM; 3 hours) induces chemokine expression in microglia[2]. Uridine 5'-diphosphate sodium salt (100 μM; 0.5, 1, 3, 6 12 hours) induces expression of mRNA encoding CCL2 and CCL3 within 30 min, and such expression reaches maximal levels at 1 h, returning to basal levels at 3-12 h[2]. UDP (10, 100, 1000 μM; 3 hours) induces a concentration-dependent increase in the expression of chemokines at both the mRNA and protein level [2]. Activation of NFATc1 and NFATc2 in microglia induced by Uridine 5'-diphosphate sodium salt (100 μM; for 15 min) [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1272 mL	10.6358 mL	21.2716 mL
5 mM	0.4254 mL	2.1272 mL	4.2543 mL
10 mM	0.2127 mL	1.0636 mL	2.1272 mL
50 mM	0.0425 mL	0.2127 mL	0.4254 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

Jacobson KA, et al. Development of selective agonists and antagonists of P2Y receptors. Purinergic Signal. 2009 Mar;5(1):75-89.

Kim B, et al. Uridine 5'-diphosphate induces chemokine expression in microglia and astrocytes through activation of the P2Y6 receptor. J Immunol. 2011 Mar 15;186(6):3701-9.