

Uridine-5'-diphosphate disodium salt

Chemical Properties

CAS No. :	27821-45-0
Formula:	C ₉ H ₁₂ N ₂ Na ₂ O ₁₂ P ₂
Molecular Weight:	448.125
Storage:	Store at low temperature,Keep away from direct sunlight,Keep away from moisture 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	Uridine-5'-diphosphate disodium salt (UDP disodium salt) is a specific agonist of the P2Y ₆ receptors (EC ₅₀ = 13 nM for human P2Y ₆), stimulating the production of inflammatory mediators, phagocytosis, and vasoconstriction. Uridine-5'-diphosphate disodium salt also acts as an antagonist of P2Y ₁₄ .
Targets(IC50)	Endogenous Metabolite,DNA/RNA Synthesis,P2Y Receptor

Solubility Information

Solubility	DMSO: 60.00 mg/mL (133.89 mM),Sonication is recommended. H ₂ O: 111.00 mg/mL (247.70 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2315 mL	11.1575 mL	22.315 mL
5 mM	0.4463 mL	2.2315 mL	4.463 mL
10 mM	0.2231 mL	1.1157 mL	2.2315 mL
50 mM	0.0446 mL	0.2231 mL	0.4463 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, K.A., et al. Development of selective agonists and antagonists of P2Y receptors. *Purinergic Signal*. 5(1), 75-89 (2009).

Xu X, Lu Y, Cao L, et al. Tumor-intrinsic P2RY6 drives immunosuppression by enhancing PGE2 production. *Cell Reports*. 2024, 43(7): 114469.

Abbracchio, M.P., et al. International Union of Pharmacology LVIII: Update on the P2Y G protein-coupled nucleotide receptors: From molecular mechanisms and pathophysiology to therapy. *Pharmacological Reviews* 58 (3), 281-341 (2006).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481