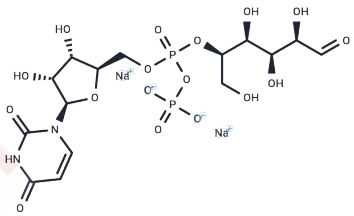
Data Sheet (Cat.No.T4743)

TargetMol

Uridine 5′-diphosphoglucose disodium salt

Chemical Properties



CAS No. : 28053-08-9

Formula: C15H22N2Na2O17P2

Molecular Weight: 610.27

Storage: Store under nitrogen,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	Uridine 5′-diphosphoglucose disodium salt (UDP-Glucose sodium salt) is an endogenous nucleotide sugar involved in glycosyltransferase reactions in metabolism. It is an agonist of the P2Y14 receptor (EC50 = 0.35 μM) and can also bind to and activate GPR17, inducing oligodendrocyte differentiation at a maximal concentration of 100 μM.
Targets(IC50)	Endogenous Metabolite,P2Y Receptor

Solubility Information

Solubility	H2O: 125 mg/mL (204.83 mM),Sonication is recommended. DMSO: 128.75 mg/mL (210.97 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (8.19 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6386 mL	8.1931 mL	16.3862 mL
5 mM	0.3277 mL	1.6386 mL	3.2772 mL
10 mM	0.1639 mL	0.8193 mL	1.6386 mL
50 mM	0.0328 mL	0.1639 mL	0.3277 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).

Lecca, D., et al. The recently identified P2Y-like receptor GPR17 is a sensor of brain damage and a new target for brain repair. PLoS One 3(10), (2008).