

P2Y14R antagonist 3

Chemical Properties

CAS No. :

Formula: C₂₆H₂₅N₅O₅

Molecular Weight: 487.51

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	P2Y14R antagonist 3 (compound A) is an orally active P2Y14R antagonist with an IC ₅₀ of 23.60 nM and a K _d of 7.26 μM. It mitigates lung injury in mice induced by Lipopolysaccharides (LPS) and can be utilized in the study of inflammatory diseases.
Targets(IC ₅₀)	P2Y Receptor
In vitro	P2Y14R antagonist 3 does not inhibit CYP1A2 and CYP2C9, but exhibits weak inhibitory activity against CYP2C19 and CYP3A4 with IC ₅₀ values of 28.6 μM and 21.3 μM, respectively [1]. This compound shows no cardiotoxic side effects and demonstrates excellent biopharmaceutical stability, resisting degradation in simulated gastric and intestinal fluids. It also maintains high metabolic stability in human liver microsomes, categorizing it as a low-clearance compound [1].
In vivo	The administration of P2Y14R antagonist 3 (2-6 mg/kg; oral administration; once daily for 7 consecutive days) mitigates the severity of lung injury in mice induced by LPS, leading to reduced immune cell infiltration and significantly lower levels of inflammatory factors IL-6, TNF-α, and IL-1β.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0512 mL	10.2562 mL	20.5124 mL
5 mM	0.4102 mL	2.0512 mL	4.1025 mL
10 mM	0.2051 mL	1.0256 mL	2.0512 mL
50 mM	0.041 mL	0.2051 mL	0.4102 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.

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