

PSB-1901

Chemical Properties

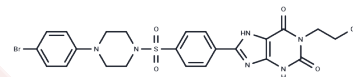
CAS No. : 2332835-02-4

Formula: C₂₄H₂₅BrN₆O₄S

Molecular Weight: 573.46

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	PSB-1901 is a highly potent and selective A2B adenosine receptor antagonist exhibiting picomolar affinity for human A2BAR with exceptional subtype selectivity exceeding 10,000-fold over other adenosine receptors, while maintaining comparable potency in mouse A2BAR, making PSB-1901 a powerful pharmacological probe for preclinical investigations of adenosine-mediated signaling pathways.
Targets(IC50)	Adenosine Receptor
In vitro	In pharmacological assays, PSB-1901 acted as a full agonist of the human P2Y6 receptor with an EC ₅₀ in the nM range, triggering Gq-protein coupled signaling and intracellular calcium mobilization [1].
In vivo	In physiological models, PSB-1901 is used to investigate P2Y6-mediated biological responses. In the immune system, activation of P2Y6 receptors on microglia drives phagocytosis, a process for clearing cellular debris and pathogens. In the cardiovascular system, PSB-1901 is associated with vasoconstriction. Its metabolic stability allows for the study of prolonged physiological effects without confounding factors from rapid ligand degradation [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (139.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7438 mL	8.719 mL	17.438 mL
5 mM	0.3488 mL	1.7438 mL	3.4876 mL
10 mM	0.1744 mL	0.8719 mL	1.7438 mL
50 mM	0.0349 mL	0.1744 mL	0.3488 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

El-Tayeb A, et al. Structural modifications of UMP, UDP, and UTP leading to subtype-selective agonists for P2Y2, P2Y4, and P2Y6 receptors[J]. Journal of medicinal chemistry, 2011, 54(8): 2878-2890.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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