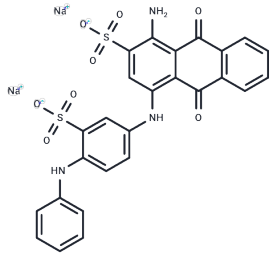
Data Sheet (Cat.No.T23195)

PSB-0739

Chemical Properties



CAS No. :	1052087-90-7
Formula:	C26H17N3Na2O8S2
Molecular Weight:	609.54
Storage:	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	PSB-0739 Selective platelet P2Y12 receptor antagonist characterized by competitive binding and high affinity (Ki =24.9 nM) with antithrombotic and platelet aggregation modulating effects.
Targets(IC50)	P2Y Receptor
In vitro	PSB-0739 inhibits the formation of semen-derived amyloid fibrils (SEVI), which enhance HIV-1 infection. It demonstrates direct anti-HIV activity with an IC_{50} of 21.77±5.15μM, without significant cytotoxicity in HeLa cells at concentrations below 62.5μM[1].
In vivo	In rat models, PSB-0739 administered intrathecally (0.01–0.3mg/kg) significantly reduced CFA-induced inflammatory pain and sciatic nerve ligation-induced neuropathic pain, with a minimal effective dose of 0.1mg/kg. It also increased pain thresholds in the hot plate test, indicating analgesic effects. Additionally, PSB-0739 decreased the expression of pro-inflammatory cytokines such as IL-1β and TNF-α in inflamed tissues (paw and spinal cord), suggesting its mechanism involves inhibition of cytokine signaling both centrally and peripherally[2].

Solubility Information

Solubility	H2O: 1 mg/mL (1.64 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6406 mL	8.2029 mL	16.4058 mL
5 mM	0.3281 mL	1.6406 mL	3.2812 mL
10 mM	0.1641 mL	0.8203 mL	1.6406 mL
50 mM	0.0328 mL	0.1641 mL	0.3281 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

Lan Y, Yang Z, Liu H, Cheng H, Liu S, Tan S. [PSB0739 inhibits formation of semen-derived amyloid fibril]. Nan Fang Yi Ke Da Xue Xue Bao. 2018 Nov 30;38(11):1338-1343. Chinese.

Micklewright JJ, Layhadi JA, Fountain SJ. P2Y12 receptor modulation of ADP-evoked intracellular Ca2+ signalling in THP-1 human monocytic cells. Br J Pharmacol. 2018 Jun;175(12):2483-2491.