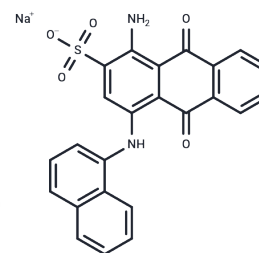


PSB-06126

Chemical Properties

CAS No. : 1052089-16-3
 Formula: C₂₄H₁₅N₂NaO₅S
 Molecular Weight: 466.44
 Storage: Store at low temperature
 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-06126 is a selective NTPDase3 (nucleotide triphosphate diphosphate hydrolase 3) inhibitor with a K_i of 1.5 μ M for rat NTPDase3 and an IC_{50} of 7.76 μ M for human NTPDase3 ($K_i = 4.39 \mu$ M). It is suitable for investigating cancer and immune-related diseases.
Targets(IC_{50})	Immunology/Inflammation related, Phosphatase
In vitro	In mesenchymal stem cells (MSCs), PSB-06126 (3 μ M) can block the overexpression of NTPDase3. PSB-06126 increases extracellular ATP levels by activating P2X7 and P2Y6 receptors, ultimately promoting osteogenic differentiation and mineralization of MSCs. [3]

Solubility Information

Solubility	Ethanol: <23.32 mg/mL, Sonication is recommended. DMSO: 100 mg/mL (214.39 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.58 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1439 mL	10.7195 mL	21.439 mL
5 mM	0.4288 mL	2.1439 mL	4.2878 mL
10 mM	0.2144 mL	1.0719 mL	2.1439 mL
50 mM	0.0429 mL	0.2144 mL	0.4288 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

Younis Baqi, et al. Ecto-nucleotidase inhibitors: recent developments in drug discovery. *Mini Rev Med Chem*. 2015; 15(1):21-33.

Amelie Fiene, et al. Fluorescence polarization immunoassays for monitoring nucleoside triphosphate diphosphohydrolase (NTPDase) activity. *Analyst*. 2015 Jan 7;140(1):140-8.

J B Noronha-Matos, et al. Mesenchymal Stem Cells Ageing: Targeting the "Purinome" to Promote Osteogenic Differentiation and Bone Repair. *J Cell Physiol*. 2016 Sep;231(9):1852-61.

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