

Prostaglandin E2 Inhibitor 3

Chemical Properties

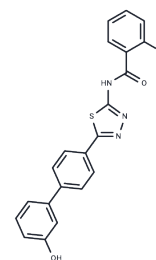
CAS No. :

Formula: C₂₁H₁₄BrN₃O₂S

Molecular Weight: 452.32

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	Prostaglandin E2 (PGE ₂) inhibitor 3 is a selective inhibitor targeting microsomal prostaglandin E synthase-1 (mPGES-1; IC ₅₀ = 0.2 μM), demonstrating greater selectivity for mPGES-1 over COX-1, COX-2, 5-lipoxygenase (5-LO), and soluble epoxide hydrolase (sEH) in assays at 10 μM. This compound effectively reduces IL-1β-induced PGE ₂ production in A549 cells and decreases LPS-induced IL-6 and PGE ₂ in J774A.1 macrophages at concentrations of 10 and 1 μM, respectively. Additionally, it blocks the production of 5-LO-derived products, including leukotriene B ₄ (LTB ₄) and 5-H(p)ETE, in response to calcium ionophore A23187 alone or combined with arachidonic acid, with IC ₅₀ values of 4.9 and 5.2 μM, respectively. When administered in vivo at doses of 10 mg/kg, PGE ₂ inhibitor 3 effectively prevents leukocyte infiltration in a mouse model of zymosan-induced peritonitis.
Targets(IC ₅₀)	Others

Solubility Information

Solubility	Ethanol: Soluble DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2108 mL	11.0541 mL	22.1082 mL
5 mM	0.4422 mL	2.2108 mL	4.4216 mL
10 mM	0.2211 mL	1.1054 mL	2.2108 mL
50 mM	0.0442 mL	0.2211 mL	0.4422 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

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