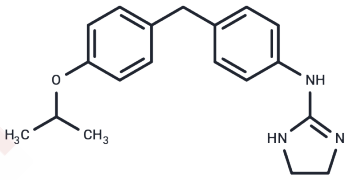
Data Sheet (Cat.No.T4436)

RO1138452

Chemical Properties



CAS No. : 221529-58-4

Formula: C19H23N3O

Molecular Weight: 309.41

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	RO1138452 (CAY10441) is a selective and orally bioavailable antagonist of prostacyclin receptor (pKi: 8.3). It antagonizes the carbaprostacyclin-induced activation of human neuroblastoma adenylate cyclase, blocking cyclic AMP accumulation in a dose-dependent manner. Likewise, it inhibits the binding of tritiated iloprost to rodent neuroblastoma cells with a Ki of about 1.5 nM. At levels between 2-20 mg/kg in rats, CAY10441 shows significant analgesic activity in standard antinociceptive assays [1].
Targets(IC50)	Prostaglandin Receptor

Solubility Information

Solubility	DMSO: 45 mg/mL (145.44 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: 2 mg/mL (6.46 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.232 mL	16.1598 mL	32.3196 mL
5 mM	0.6464 mL	3.232 mL	6.4639 mL
10 mM	0.3232 mL	1.616 mL	3.232 mL
50 mM	0.0646 mL	0.3232 mL	0.6464 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

Clark R D, Jahangir A, Severance D, et al. Discovery and SAR development of 2-(phenylamino) imidazolines as postacyclin receptor antagonists[J]. Bioorganic & medicinal chemistry letters, 2004, 14(4): 1053-1056.