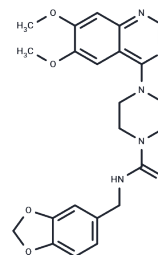


CT52923

Chemical Properties

CAS No. : 205256-55-9
 Formula: C₂₃H₂₅N₅O₄S
 Molecular Weight: 467.54
 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	CT52923 is a selective, orally active antagonist of platelet-derived growth factor receptor (PDGFR), functioning as an ATP-competitive inhibitor. It has versatile applications for researching pathological diseases such as atherosclerosis, glomerulonephritis, liver cirrhosis, pulmonary fibrosis, and cancer.
Targets(IC50)	PDGFR
In vitro	CT52923 inhibits PDGFRs and stem cell factor receptors with IC ₅₀ values of 100 to 200 nM. CT52923 (0.01-30 μM; 24 h) blocks smooth muscle cell migration or fibroblast proliferation induced by platelet-derived growth factor, IC ₅₀ is 64 and 280 nM respectively [1].
In vivo	CT52923 (oral; 5,15,30 and 50 mg/kg; twice daily) significantly inhibits the formation of neointima after carotid artery injury in rats [1].

Solubility Information

Solubility	DMSO: 60 mg/mL (128.33 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.35 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	2.1389 mL	10.6943 mL	21.3885 mL
5 mM	0.4278 mL	2.1389 mL	4.2777 mL
10 mM	0.2139 mL	1.0694 mL	2.1389 mL
50 mM	0.0428 mL	0.2139 mL	0.4278 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

J C Yu, et al. Efficacy of the novel selective platelet-derived growth factor receptor antagonist CT52923 on cellular proliferation, migration, and suppression of neointima following vascular injury. J Pharmacol Exp Ther. 2001 Sep; 298(3):1172-8.

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