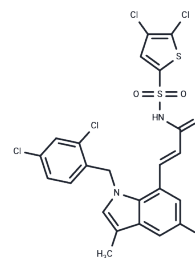


DG-041

Chemical Properties

CAS No. : 861238-35-9
 Formula: C₂₃H₁₅Cl₄FN₂O₃S₂
 Molecular Weight: 592.32
 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 | DG-041 is an antagonist of high affinity EP3 receptor (IC ₅₀ s: 4.6 nM and 8.1 nM in the binding and FLIPR assay, respectively). DG-041 inhibits PGE ₂ facilitation of platelet aggregation and it also crosses the blood-brain barrier. |
| Targets(IC ₅₀) | Prostaglandin Receptor |
| In vitro | DG-041 was a less effective the DP1 (IC ₅₀ : 131 nM), EP1 (IC ₅₀ : 486 nM) and TP receptors (IC ₅₀ : 742 nM) antagonist [1]. |
| In vivo | DG-041 has CL of 1250 mL/h/kg for intravenous. DG-041 (1.78 mg/kg for i.v or 9.62 mg/kg for p.o) has t _{1/2} of 2.7 hours, 4.06 hours. DG-041 (1.78 mg/kg for i.v or 9.62 mg/kg for p.o) has C _{max} of 9.46 μM, 2.74 μM for intravenous and oral administration, respectively [1]. |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 160 mg/mL (270.12 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: < 10 mg/mL (16.88 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (16.88 mM), Suspension. <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 | 1.6883 mL | 8.4414 mL | 16.8828 mL |
| 5 mM | 0.3377 mL | 1.6883 mL | 3.3766 mL |
| 10 mM | 0.1688 mL | 0.8441 mL | 1.6883 mL |
| 50 mM | 0.0338 mL | 0.1688 mL | 0.3377 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

Singh J, et al. Antagonists of the EP3 receptor for prostaglandin E2 are novel antiplatelet agents that do not prolong bleeding. ACS Chem Biol. 2009 Feb 20;4(2):115-26.

Hategan G, et al. Heterocyclic 1,7-disubstituted indole sulfonamides are potent and selective human EP3 receptor antagonists. Bioorg Med Chem Lett. 2009 Dec 1;19(23):6797-800.

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