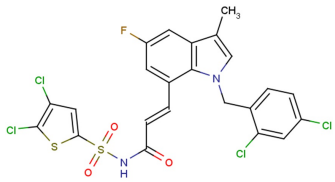
Data Sheet (Cat.No.T15108)

TargetMol
A DRUG SCREENING EXPERT

DG-041

Chemical Properties



CAS No.:	861238-35-9
Formula:	C23H15Cl4FN2O3S2
Molecular Weight:	592.32
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	DG-041 is an antagonist of high-affinity EP3 receptor (IC50s: 4.6 nM and 8.1 nM in the binding and FLIPR assay, respectively). DG-041 inhibits PGE2 facilitation of platelet aggregation and has the blood-brain barrier permeability.
Targets(IC_{50})	EP3 receptor: 4.6-8.1 nM
In vitro	DG-041 was a less effective the DP1 (IC50: 131 nM), EP1 (IC50: 486 nM) and TP receptors (IC50: 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 t1/2 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 Cmax of 9.46 μM, 2.74 μM for intravenous and oral administration, respectively [1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.688 mL	8.441 mL	16.883 mL
5 mM	0.338 mL	1.688 mL	3.377 mL
10 mM	0.169 mL	0.844 mL	1.688 mL
50 mM	0.034 mL	0.169 mL	0.338 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. 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.

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

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