

SC 51089

## Chemical Properties

CAS No. : 146033-02-5

Formula: C<sub>22</sub>H<sub>20</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>3</sub>

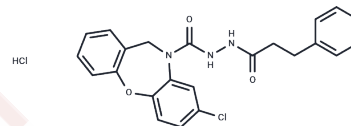
Molecular Weight: 459.33

Storage:

Keep away from direct sunlight, Keep away from moisture

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	SC 51089 is a selective prostaglandin receptor PGE2 antagonist with selectivity for prostaglandin receptor subtypes and antinociceptive activity that improves motor deficits and rescues memory decline in the Huntington's disease R6/1 mouse model .
Targets(IC50)	Prostaglandin Receptor
In vivo	In the R6/1 mouse model of Huntington's disease (HD), treatment with SC 51089 (40 µg/kg/day; i.p.) for 28 days improved motor coordination and balance deficits, rescued long-term memory loss, as well as improved the expression of specific synaptic markers and reduced the number of intranuclear inclusions of huntingtin protein in the striatum and hippocampus[3].

## Solubility Information

Solubility	DMSO: 80 mg/mL (174.17 mM), Sonication is recommended. ( < 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1771 mL	10.8854 mL	21.7708 mL
5 mM	0.4354 mL	2.1771 mL	4.3542 mL
10 mM	0.2177 mL	1.0885 mL	2.1771 mL
50 mM	0.0435 mL	0.2177 mL	0.4354 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

Abramovitz M, et al. The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs. *Biochim Biophys Acta*. 2000 Jan 17;1483(2):285-93.

Saleem S, et al. Effects of EP1 receptor on cerebral blood flow in the middle cerebral artery occlusion model of stroke in mice. *J Neurosci Res*. 2007 Aug 15;85(11):2433-40.

Anglada-Huguet M, et al. Prostaglandin E2 EP1 receptor antagonist improves motor deficits and rescues memory decline in R6/1 mouse model of Huntington's disease. *Mol Neurobiol*. 2014 Apr;49(2):784-95.

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