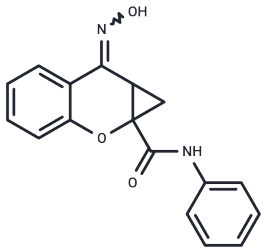
Data Sheet (Cat.No.T3464)

TargetMol

PHCCC

Chemical Properties



CAS No. : 179068-02-1

Formula: C17H14N2O3

Molecular Weight: 294.3

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	PHCCC ((-) PHCCC) is a Group I metabotropic glutamate receptor antagonist and a positive allosteric modulator of mGluR4. It also is a potent to antagonism for mGluR2 and mGluR8.
Targets(IC50)	GluR

Solubility Information

Solubility	DMSO: 55 mg/mL (186.88 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: 1 mg/mL (3.4 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	3.3979 mL	16.9895 mL	33.9789 mL
5 mM	0.6796 mL	3.3979 mL	6.7958 mL
10 mM	0.3398 mL	1.6989 mL	3.3979 mL
50 mM	0.068 mL	0.3398 mL	0.6796 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

Marino MJ et al. Allosteric modulation of group III metabotropic glutamate receptor 4: a potential approach to Parkinson's disease treatment. Proc Natl Acad Sci U S A. 2003 Nov 11;100(23):13668-73.
Maj M et al. (-)-PHCCC, a positive allosteric modulator of mGluR4: characterization, mechanism of action, and neuroprotection. Neuropharmacology. 2003 Dec;45(7):895-906.
Szczurowska E et al. Positive allosteric modulator of mGluR4 PHCCC exhibits proconvulsant action in three models of epileptic seizures in immature rats. Physiol Res. 2012;61(6):619-28.
Domin H et al. Neuroprotective potential of the group III mGlu receptor agonist ACPT-I in animal models of ischemic stroke: In vitro and in vivo studies. Neuropharmacology. 2016 Mar;102:276-94.

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