

CGP 37849

## Chemical Properties

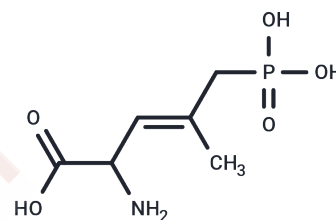
CAS No. : 127910-31-0

Formula: C<sub>6</sub>H<sub>12</sub>NO<sub>5</sub>P

Molecular Weight: 209.14

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	CGP 37849 is a competitive orally active N-methyl-D-aspartate (NMDA) receptor antagonist ((K <sub>i</sub> = 35 nM)) with potency. CGP 37849 is an anticonvulsant in rodents and also has antidepressant and anxiolytic properties.
Targets(IC <sub>50</sub> )	NMDAR, iGluR
In vitro	Within the hippocampal slice in vitro, CGP 37849 demonstrates reversible and selective antagonism against NMDA-induced increases in the firing rate of CA1 pyramidal cells. In the presence of a low Mg <sup>2+</sup> level medium, concentrations of CGP 37849 up to 10 μM effectively inhibit burst firing evoked in CA1 neurons by stimulating Schaffer collateral-commissural fibers, while leaving the magnitude of the initial population spike unaffected.[1]
In vivo	In vivo, oral administration to rats of CGP 37849 selectively blocks firing in hippocampal neurons induced by ionophoretically-applied NMDA, without affecting the responses to quisqualate or kainate.[1] Oral administration to mice of CGP 37849 suppresses maximal electroshock-induced seizures in mice with an ED <sub>50</sub> of 21 mg/kg.[1]

## Solubility Information

Solubility	H <sub>2</sub> O: 90 mg/mL (430.33 mM), Sonication is recommended. DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7815 mL	23.9074 mL	47.8149 mL
5 mM	0.9563 mL	4.7815 mL	9.563 mL
10 mM	0.4781 mL	2.3907 mL	4.7815 mL
50 mM	0.0956 mL	0.4781 mL	0.9563 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

Fagg GE, et al. CGP 37849 and CGP 39551: novel and potent competitive N-methyl-D-aspartate receptor antagonists with oral activity. *Br J Pharmacol.* 1990;99(4):791-797.

Schmutz M, et al. The competitive NMDA receptor antagonists CGP 37849 and CGP 39551 are potent, orally-active anticonvulsants in rodents. *Naunyn Schmiedebergs Arch Pharmacol.* 1990;342(1):61-66.

Papp M, et al. Antidepressant activity of non-competitive and competitive NMDA receptor antagonists in a chronic mild stress model of depression. *Eur J Pharmacol.* 1994;263(1-2):1-7.

Przegaliński E, et al. The influence of the benzodiazepine receptor antagonist flumazenil on the anxiolytic-like effects of CGP 37849 and ACPC in rats. *Neuropharmacology.* 2000;39(10):1858-1864.

**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