

CP-465022 (maleate)

Chemical Properties

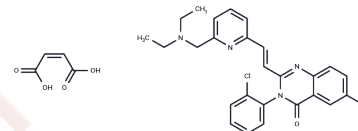
CAS No. : 199656-46-7

Formula: C30H28ClFN4O5

Molecular Weight: 579.02

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	CP-465022 Maleate is a potent, selective, noncompetitive AMPA receptor antagonist with anticonvulsant activity, effectively countering the Kainate-induced response in rat cortical neurons with an IC50 of 25 nM, making it a valuable instrument for studying the involvement of AMPA receptors in various physiological and pathophysiological processes [1] [2].
Targets(IC50)	Others,iGluR
In vitro	CP-465022 (0.0001 μM-10 μM) inhibits kainate-induced responses in a concentration-dependent manner, with an IC50 of 25 nM and nearly complete inhibition at 3.2 μM [1]. At 1 μM for 10 minutes, it slightly affects peak NMDA-induced currents but reduces 8-second currents by 26%; at 10 μM, it decreases peak currents by 36% and 8-second currents by 70% in primary cortical and cerebellar granule neuron cultures [1]. In rat cerebellar granule neuron cultures, 1 μM for 10 minutes impairs peak NMDA currents by 19% and 8-second currents by 45%, similar to cortical neurons [1]. CP-465022 (100 nM-10 μM) also inhibits kainate-induced currents in rat hippocampal cells, with 100 nM suppressing current development over 200 seconds, and 500 nM and 1 μM causing nearly complete inhibition (99.3%) within this period [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7271 mL	8.6353 mL	17.2706 mL
5 mM	0.3454 mL	1.7271 mL	3.4541 mL
10 mM	0.1727 mL	0.8635 mL	1.7271 mL
50 mM	0.0345 mL	0.1727 mL	0.3454 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.

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