Product Data Sheet

Chemical Properties

Product Name: CGP 35348

Cas No.: 123690-79-9

M.Wt: 225.22

Formula: C8H20NO4P

Chemical Name: (S)-(3-aminopropyl)(diethoxymethyl)phosphinic acid

Canonical SMILES: O[P@@](CCCN)(C(OCC)OCC)=O

Solubility: Soluble to 100 mM in sterile water

Storage: Store at RT

General tips: For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: Membrane Transporter/Ion Channel

Pathways: GABA Receptor

Description:

CGP 35348 is a selective antagonist of γ-aminobutyric acidB (GABAB) receptor with IC50 value of 34 μM [1].
The GABAB receptor is a metabotropic transmembrane receptors for GABA that is linked via G-protein to potassium channel. It stimulates the opening of K+ channel and hyperpolarize the neuron.
CGP 35348 is a selective GABAB receptor antagonist that can penetrate the blood-brain barrier. In
rat cortex slices, CGP 35348 inhibited the potentiating effect of L-baclofen on adenylate cyclase stimulated by noradrenaline. In the hippocampal slice, CGP 35348 (10, 30, 100 μM) inhibited membrane hyperpolarization induced by L-baclofen (10 μM) and the inhibitory postsynaptic potential [1].

In the spinal cord of the rat, CGP 35348 (3-30 μg) inhibited L-baclofen-induced antinociception in a dose-dependent way [2]. In the rat, CGP 35348 induced pain-like response to mechanical stimulation in a dose-dependent way and reduced the paw withdrawal threshold to pressure [3].

In rats, CGP 35348(500 mg/kg) significantly reduced food consumption by the blockade of central GABAB receptors [4].

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.