Product Data Sheet

Product Name: CGP 35348
Cat. No.: GC11153

Chemical Properties

Cas. No.	123690-79-9		
Chemical Name	(S)-(3-aminopropyl)(diethoxymethyl)phosphinic acid		
SMILES	O[P@@](CCCN)(C(OCC)OCC)=O		
Formula	$C_8H_{20}NO_4P$	M.Wt	225.22
Solubility	DMSO: 0.1 mg/ml,Ethanol: 30 mg/ml,PBS (pH 7.2): 10 mg/ml	Storage	Store at RT
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	CGP 35348		

Background

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

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].

References:

[1]. Olpe HR, Karlsson G, Pozza MF, et al. CGP 35348: a centrally active blocker of GABAB receptors. Eur J Pharmacol, 1990, 187(1): 27-38.
[2]. Hammond DL, Washington JD. Antagonism of L-baclofen-induced antinociception by CGP 35348 in the spinal cord of the rat. Eur J Pharmacol, 1993, 234(2-3): 255-262.
[3]. Hao JX, Xu XJ, Wiesenfeld-Hallin Z. Intrathecal gamma-aminobutyric acidB (GABAB) receptor antagonist CGP 35348 induces hypersensitivity to mechanical stimuli in the rat. Neurosci Lett, 1994, 182(2): 299-302.
[4]. Patel SM, Ebenezer IS. The effects of intraperitoneal and intracerebroventricular administration of the GABAB receptor antagonist CGP 35348 on food intake in rats. Eur J Pharmacol, 2004, 503(1-3): 89-93.