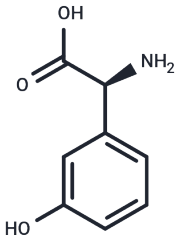
Data Sheet (Cat.No.T23291)

TargetMol

(S)-3-Hydroxyphenylglycine

Chemical Properties



CAS No. : 71301-82-1

Formula: C8H9NO3

Molecular Weight: 167.16

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	(S)-3-Hydroxyphenylglycine is an agonist of group I metabotropic glutamate receptors (mGluRs).
Targets(IC50)	GluR
In vitro	Hippocampal neurons in the slice preparation exhibit spontaneous synchronized bursting activity in the presence of picrotoxin, a γ-aminobutyric acid-A receptor antagonist. These synchronized bursts rarely exceed 500 ms in duration and thus resemble interictal discharges. Control shows one such synchronized burst, which typically consisted of an initial abrupt discharge 100–200 ms in duration (primary burst) followed by a series of briefer phasic discharges (secondary bursts). Addition of (S)-3-hydroxyphenylglycine (250–500 μM) significantly prolonged the synchronized burst duration, primarily via a marked increase in the number of secondary bursts. These prolonged discharges ranged from 1 to 7 s in duration (4,282 ± 1,060 ms, a 1,021?± 247% increase, n = 7), and the secondary bursts within each discharge gradually changed in amplitude and frequency[2].

Solubility Information

Solubility	DMSO: < 1 mg/mL (insoluble or slightly soluble) H2O: 6.56 mg/mL (39.24 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.9823 mL	29.9115 mL	59.8229 mL
5 mM	1.1965 mL	5.9823 mL	11.9646 mL
10 mM	0.5982 mL	2.9911 mL	5.9823 mL
50 mM	0.1196 mL	0.5982 mL	1.1965 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

Yu SP, Sensi SL, et al. Membrane-delimited modulation of NMDA currents by metabotropic glutamate receptor subtypes 1/5 in cultured mouse cortical neurons. J Physiol. 1997 Mar 15;499 (Pt 3)(Pt 3):721-32.
Merlin LR, Wong RK. Role of group I metabotropic glutamate receptors in the patterning of epileptiform activities in vitro. J Neurophysiol. 1997 Jul;78(1):539-44.