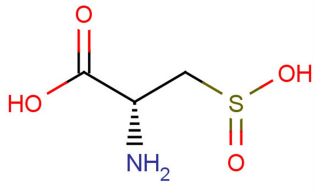
Data Sheet (Cat.No.T11803)

TargetMol
A DRUG SCREENING EXPERT

L-Cysteinesulfinic acid

Chemical Properties



CAS No.:	1115-65-7
Formula:	C3H7NO4S
Molecular Weight:	153.16
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	L-Cysteinesulfinic acid is a potent agonist at several rat metabotropic glutamate receptors (mGluRs, pEC50s of 3.92±0.03, 4.6±0.2, 3.9±0.2, 2.7±0.2, 4.0±0.2, and 3.94±0.08 for mGluR1, mGluR5, mGluR2, mGluR4, mGluR6, and mGluR8, respectively).
Targets(IC_{50})	Human Endogenous Metabolite: None
In vitro	L-CSA is an endogenous agonist of the PLD-coupled metabotropic excitatory amino acids (EAA) receptor. L-CSA selectively activates the PLD-coupled receptor. 1 mM L-CSA induces a significant increase in PLD activity in hippocampal slices, whereas 1 mM concentrations of L-glutamate, L-aspartate, and L-HCA are without effect. L-CSA elicits a dose-dependent increase in PLD activity in rat hippocampal slices in the presence of iGluR antagonists, with an approximate EC50 of 500 uM. The PLD response induced by 1 mM L-CSA is not significantly decreased in the presence of 1 uM tetrodotoxin, suggesting that this response is not dependent upon L-CSA-induced increases in cell firing.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.529 mL	32.646 mL	65.291 mL
5 mM	1.306 mL	6.529 mL	13.058 mL
10 mM	0.653 mL	3.265 mL	6.529 mL
50 mM	0.131 mL	0.653 mL	1.306 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Shi Q, et al. L-homocysteine sulfinic acid and other acidic homocysteine derivatives are potent and selective metabotropic glutamate receptor agonists. J Pharmacol Exp Ther. 2003 Apr;305(1):131-42.
2. Boss V, et al. L-cysteine sulfinic acid as an endogenous agonist of a novel metabotropic receptor coupled to stimulation of phospholipase D activity.

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