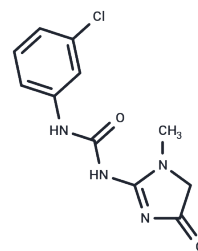


Fenobam

Chemical Properties

CAS No. :	57653-26-6
Formula:	C ₁₁ H ₁₁ ClN ₄ O ₂
Molecular Weight:	266.68
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	Fenobam shows inverse agonist activity which blocks the mGlu5 receptor basal activity (IC ₅₀ : 84 nM). Fenobam has anxiolytic activity. Fenobam is a selective and non-competitive mGluR5 antagonist acting at an allosteric modulatory site (K _d values are 54 and 31 nM for rat and human recombinant mGlu5 receptors, respectively).
Targets(IC ₅₀)	Apoptosis, GluR
In vivo	Fenobam sulfate (30-60 mg/kg; p.o.) significantly inhibited cocaine self-administration [3].

Solubility Information

Solubility	DMSO: 55 mg/mL (206.24 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7498 mL	18.7491 mL	37.4981 mL
5 mM	0.750 mL	3.7498 mL	7.4996 mL
10 mM	0.375 mL	1.8749 mL	3.7498 mL
50 mM	0.075 mL	0.375 mL	0.750 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

Porter RH, et al. Fenobam: a clinically validated nonbenzodiazepine anxiolytic is a potent, selective, and noncompetitive mGlu5 receptor antagonist with inverse agonist activity. *J Pharmacol Exp Ther*. 2005 Nov;315(2): 711-21.

Laura F, et al. The Metabotropic Glutamate Receptor 5 Negative Allosteric Modulator Fenobam: Pharmacokinetics, Side Effects, and Analgesic Effects in Healthy Human Subjects. *bioRxiv* 391383;

Keck TM, et al. Fenobam sulfate inhibits cocaine-taking and cocaine-seeking behavior in rats: implications for addiction treatment in humans. *Psychopharmacology (Berl)*. 2013;229(2):253-265.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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