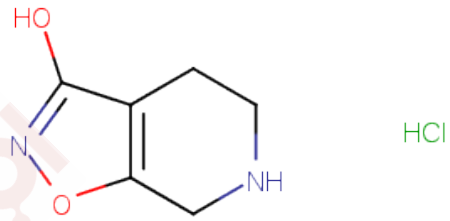
Data Sheet (Cat.No.T7803)

TargetMol

Gaboxadol hydrochloride

Chemical Properties



CAS No. :	85118-33-8
Formula:	C6H9ClN2O2
Molecular Weight:	176.601
Storage:	Keep away from direct sunlight,Store under nitrogen 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	Gaboxadol (hydrochloride) is a GABAA receptor agonist.
Targets(IC50)	GABA Receptor
In vivo	Gaboxadol produced ≥80 % gaboxadol-lever responding and did not alter rates. No other drug produced, on average, ≥80 % drug-lever responding up to doses that decreased rates, although 1.78 mg/kg midazolam produced 32 % gaboxadol-lever responding. Ethanol and pregnanolone did not enhance the effects of gaboxadol. Rats discriminating midazolam, pregnanolone, or ethanol from vehicle responded predominantly on the vehicle lever after receiving gaboxadol[1].
Animal Research	Eight rats discriminated 5.6 mg/kg gaboxadol from vehicle while responding under a fixed - ratio 10 schedule for food.?Modulators acting at GABAA receptors containing α4-δ subunits (pregnanolone, ethanol, and flumazenil) and receptors that do not contain those subunits (midazolam) were studied alone ;?pregnanolone and ethanol were also combined with gaboxadol.?In addition, gaboxadol was studied in separate groups discriminating 0.32 mg/kg midazolam, 3.2 mg/kg pregnanolone, or 0.75 g/kg ethanol from vehicle[1].

Solubility Information

Solubility	DMSO: 75 mg/mL (424.69 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.67 mg/mL (9.46 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.6625 mL	28.3126 mL	56.6251 mL
5 mM	1.1325 mL	5.6625 mL	11.325 mL
10 mM	0.5663 mL	2.8313 mL	5.6625 mL
50 mM	0.1133 mL	0.5663 mL	1.1325 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

Zanettini C , Pressly J D , Ibarra M H , et al. Comparing the discriminative stimulus effects of modulators of GABAAreceptors containing α4-δ subunits with those of gaboxadol in rats[J]. Psychopharmacology, 2016, 233(10): 2005-2013.

Larsen M , René Holm, Jensen K G , et al. 5-Hydroxy-l-tryptophan alters gaboxadol pharmacokinetics in rats: Involvement of PAT1 and rOat1 in gaboxadol absorption and elimination[J]. bulletin of the academy of military medical sciences, 2010, 39(1-3):68-75.

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