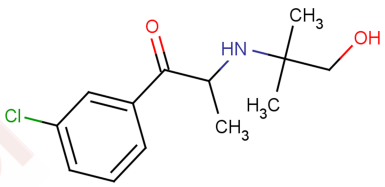
Data Sheet (Cat.No.T11588)

TargetMol

Hydroxybupropion

Chemical Properties



CAS No. : 92264-81-8

Formula: C13H18ClNO2

Molecular Weight: 255.74

Storage: Keep away from moisture,Keep away from direct sunlight
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	Hydroxybupropion is the major active metabolite of Bupropion and an antagonist of nACh receptor. Hydroxybupropion inhibits norepinephrine uptake (IC50 = 1.7 μM).
Targets(IC50)	Adrenergic Receptor,AChR,Norepinephrine,Drug Metabolite
In vitro	Hydroxybupropion shows stronger antitetrabenazine activity and has a lower LD50 value than the erythro- and threo- metabolites. Hydroxybupropion inhibits norepinephrine and dopamine uptake, antagonizes nicotine, and shows antidepressant effects in rodents[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (351.92 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: 3.3 mg/mL (12.9 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	3.9102 mL	19.5511 mL	39.1022 mL
5 mM	0.782 mL	3.9102 mL	7.8204 mL
10 mM	0.391 mL	1.9551 mL	3.9102 mL
50 mM	0.0782 mL	0.391 mL	0.782 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

Damaj MI, et al. Enantioselective effects of hydroxy metabolites of bupropion on behavior and on function of monoamine transporters and nicotinic receptors. Mol Pharmacol. 2004 Sep;66(3):675-82.