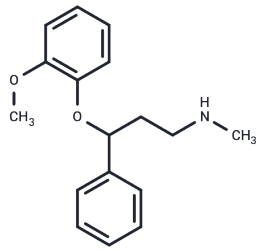
Data Sheet (Cat.No.T69145)

TargetMol

Nisoxetine

Chemical Properties



CAS No. : 53179-07-0

Formula: C17H21NO2

Molecular Weight: 271.35

Storage: Store at low temperature
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	Nisoxetine is a selective NET (noradrenaline transporter) inhibitor (Kd=0.76 nM) capable of blocking voltage-gated sodium channels, inducing spinal anaesthesia in rats, and exhibiting antidepressant effects.
Targets(IC50)	Norepinephrine,Monoamine Transporter,Sodium Channel
In vitro	Nisoxetine inhibits the binding of [3H]Nisoxetine on rat frontal cortex membranes with a Ki = 1.4 ± 0.1 nM[2]. Nisoxetine inhibits the uptake of [3H]norepinephrine in rat frontal cortex synaptosomes with a Ki = 2.1 ± 0.3 nM[2]. At membrane potentials of -70 mV and -100 mV, the IC50 values of Nisoxetine for Na+ currents are 1.6 μM and 28.6 μM, respectively[3].
In vivo	Acute administration of Nisoxetine (saline: 0, 3, 10, and 30 mg/kg; i.p.) resulted in a dose-dependent reduction in the 24 h refeeding response in male Sprague Dawley rats maintained on standard chow [4].

Solubility Information

Solubility	DMSO: 200 mg/mL (737.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6853 mL	18.4264 mL	36.8528 mL
5 mM	0.7371 mL	3.6853 mL	7.3706 mL
10 mM	0.3685 mL	1.8426 mL	3.6853 mL
50 mM	0.0737 mL	0.3685 mL	0.7371 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

Béïque JC, et, al. Affinities of venlafaxine and various reuptake inhibitors for the serotonin and norepinephrine transporters. Eur J Pharmacol. 1998 May 15; 349(1): 129-32.
Cheetham SC, et, al. [3H]nisoxetine-a radioligand for noradrenaline reuptake sites: correlation with inhibition of [3H]noradrenaline uptake and effect of DSP-4 lesioning and antidepressant treatments. Neuropharmacology. 1996 Jan; 35(1): 63-70.
Leung YM, et, al. Nisoxetine blocks sodium currents and elicits spinal anesthesia in rats. Pharmacol Rep. 2013; 65 (2): 350-7.
Bello NT, et al. High-fat diet-induced alterations in the feeding suppression of low-dose nisoxetine, a selective norepinephrine reuptake inhibitor. J Obes. 2013;2013:457047.