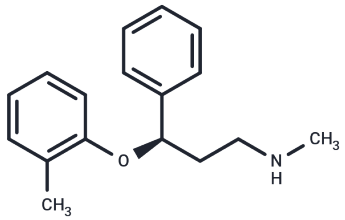
Data Sheet (Cat.No.T20886)

TargetMol
YOUR TARGET MOLECULES

Atomoxetine

Chemical Properties



CAS No. : 83015-26-3

Formula: C17H21NO

Molecular Weight: 255.35

Appearance: no data available

Storage: store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Atomoxetine (HSDB 7352) is a selective norepinephrine inhibitor that may cause an increase in blood pressure by increasing norepinephrine concentrations in peripheral sympathetic neurons .Atomoxetine is a highly selective antagonist of presynaptic norepinephrine transporters with little or no affinity for other norepinephrine receptors or other neurotransmitter transporters or receptors, but has little or no affinity for 5-hydroxytryptamine transporter. Atomoxetine selectively inhibits reuptake of norepinephrine and can be used to treat adolescents with ADHD and chronic tics.
Targets(IC50)	Norepinephrine
In vitro	Atomoxetine (Tomoxetine) exhibits state- and dose-dependent interaction with the human cardiac sodium channel (hNav1.5) in tsA201 cells, with concentrations ranging from 1 to 100 μM and exposure durations of 0.5 to 20 seconds.[2]
In vivo	Administration of Atomoxetine (Tomoxetine) at doses of 0.3-3 mg/kg (i.p.) for a duration of 0-4 hours in male Sprague-Dawley rats results in a threefold increase in extracellular norepinephrine and dopamine levels, along with an increase in Fos expression observed in the prefrontal cortex.[1] Furthermore, Atomoxetine (Tomoxetine) at doses of 0.1-5 mg/kg (i.p. and p.o.) administered over a period of 14 days in spontaneously hypertensive rats demonstrates the potential to ameliorate ADHD-related behaviors in rats.[3]

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9162 mL	19.581 mL	39.1619 mL
5 mM	0.7832 mL	3.9162 mL	7.8324 mL
10 mM	0.3916 mL	1.9581 mL	3.9162 mL
50 mM	0.0783 mL	0.3916 mL	0.7832 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.

Reference

Turner M, et al. Effects of atomoxetine on locomotor activity and impulsivity in the spontaneously hypertensive rat. Behav Brain Res. 2013;243:28-37.