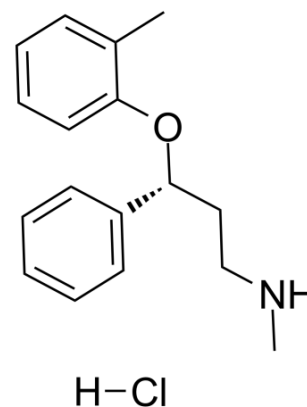


Atomoxetine hydrochloride

Cat. No.:	HY-17385		
CAS No.:	82248-59-7		
Molecular Formula:	C ₁₇ H ₂₂ ClNO		
Molecular Weight:	291.82		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (342.68 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.4268 mL	17.1338 mL	34.2677 mL
	5 mM	0.6854 mL	3.4268 mL	6.8535 mL
	10 mM	0.3427 mL	1.7134 mL	3.4268 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (8.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (8.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (8.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Atomoxetine hydrochloride is a potent and selective noradrenalin re-uptake inhibitor (K_i values are 5, 77 and 1451 nM for inhibition of radioligand binding to human NET, SERT and DAT respectively). IC₅₀ value: 5 nM (K_i for human NET)Target: NETAtomoxetine displays minimal affinity for a range of other neurotransmitter receptors and transporters (K_i > 1 μM). Atomoxetine is antidepressant and a commonly used non-stimulant treatment for Attention deficit hyperactivity disorder (ADHD).

CUSTOMER VALIDATION

- Brain Behav Immun. 2021 Jan 4;S0889-1591(20)32487-9.
- School of Pharmacy & Pharmaceutical Sciences Trinity College Institute of Neuroscience Trinity College, University of Dublin. 2019 Mar.

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- [2]. Turner M, Wilding E, Cassidy E, Dommett EJ. Effects of atomoxetine on locomotor activity and impulsivity in the spontaneously hypertensive rat. *Behav Brain Res.* 2012 Dec 22;243C:28-37.
- [3]. Bymaster FP, Katner JS, Nelson DL et al. Atomoxetine increases extracellular levels of norepinephrine and dopamine in prefrontal cortex of rat: a potential mechanism for efficacy in attention deficit/hyperactivity disorder. *Neuropsychopharmacology.* 2002 Nov;27(5):699-711.
- [4]. Owens MJ, Morgan WN, Plott SJ, Nemeroff CB. Neurotransmitter receptor and transporter binding profile of antidepressants and their metabolites. *J Pharmacol Exp Ther.* 1997 Dec;283(3):1305-22.
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Caution: Product has not been fully validated for medical applications. For research use only.

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