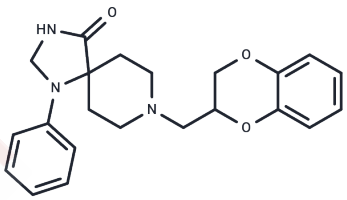
Data Sheet (Cat.No.T23382)

TargetMol

Spiroxatrine

Chemical Properties



CAS No. :	1054-88-2
Formula:	C22H25N3O3
Molecular Weight:	379.45
Storage:	Store at low temperature,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	Spiroxatrine (R 5188) is a selective and potent 5-HT1α and α2-adrenergic dual antagonist with sedative activity, and inhibitory effects on 5-HT1α, 5-HT1β, 5-HT2, and dopamine receptors. Spiroxatrine may be used in the study of disorders related to the cardiovascular system.
Targets(IC50)	5-HT Receptor,Adrenergic Receptor,Dopamine Receptor
In vitro	Sproxatrine (0.01-0.1 μM, 15 mins) enhances contraction in the vas deferens tissue of α2A/D-adrenergic receptor knockout mice[2].
In vivo	Sproxatrine (1-25 μg, intraperitoneal injection, 5 days) increases withdrawal latency to thermal and mechanical stimuli in the hind paw of nerve-injured rats and carrageenan-induced inflammatory rats[3]. Sproxatrine (4 mg/kg/day, intraperitoneal injection, 5 minutes) enhances the effect of Fluoxetine in reducing selectively bred alcohol-preferring (P) rat's voluntary oral ethanol intake[3].

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6354 mL	13.177 mL	26.3539 mL
5 mM	0.5271 mL	2.6354 mL	5.2708 mL
10 mM	0.2635 mL	1.3177 mL	2.6354 mL
50 mM	0.0527 mL	0.2635 mL	0.5271 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

D L Nelson, et al. Spiroxatrine: a selective serotonin1A receptor antagonist. Eur J Pharmacol. 1986 May 13;124(1-2):207-8.

Linda Cleary, et al. Investigation of neurotransmission in vas deferens from alpha(2A/D)-adrenoceptor knockout mice. Br J Pharmacol. 2002 Jul;136(6):857-64.

W J McBride, et al. Spiroxatrine augments fluoxetine-induced reduction of ethanol intake by the P line of rats. Pharmacol Biochem Behav. 1989 Oct;34(2):381-6.

Z-Y Liu, et al. Involvement of 5-hydroxytryptamine(1A) receptors in the descending anti-nociceptive pathway from periaqueductal gray to the spinal dorsal horn in intact rats, rats with nerve injury and rats with inflammation. Neuroscience. 2002;112(2):399-407.