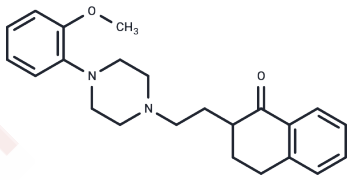
Data Sheet (Cat.No.T10100)

TargetMol

QF0301B

Chemical Properties



CAS No. : 149247-12-1

Formula: C23H28N2O2

Molecular Weight: 364.48

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	QF0301B is a potent α1-adrenergic receptor antagonist with inhibitory effects on α2-adrenergic receptors, 5-HT2A and histamine H1 receptors.
Targets(IC50)	5-HT Receptor,Adrenergic Receptor
In vitro	QF0301B exhibits marked α1-adrenoceptor blocking activity in isolated rubbed rat aorta rings, with a pA2 value of 9.00±0.12. In electrically stimulated rat vas deferens, QF0301B reverses and competitively antagonizes the inhibitory action produced by clonidine. Additionally, it inhibits the force and rate of contraction in rat isolated atria (pA2=5.91±0.43), competitively antagonizes the contractile effect of 5-HT in rat aorta (pA2=6.75±0.06) and in rat stomach fundus (pA2=7.13±0.48), as well as the contractions induced by histamine in isolated guinea pig longitudinal ileal muscle (pA2=7.40±0.40). QF0301B shows noncompetitive low action in 5-HT3, muscarinic, and nicotinic receptors, as well as Ca2+ antagonist[1].
In vivo	QF0301B (0.1-0.2 mg/kg iv) induces a significant and prolonged decrease in mean arterial blood pressure accompanied by bradycardia. It does not significantly alter the cardiovascular effects of either 5-hydroxytryptamine (serotonin, 5-HT, 75 mg/kg iv) or the selective α2-adrenoceptor agonist B-HT 920 (0.2 mg/kg iv). However, QF0301B markedly inhibits the hypertensive effect of noradrenaline (5 mg/kg iv), a nonselective α-adrenergic receptor agonist[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7436 mL	13.7182 mL	27.4363 mL
5 mM	0.5487 mL	2.7436 mL	5.4873 mL
10 mM	0.2744 mL	1.3718 mL	2.7436 mL
50 mM	0.0549 mL	0.2744 mL	0.5487 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

Orallo F, et al. In vivo and in vitro pharmacological studies of a new hypotensive compound (QF0301B) in rat: Comparison with prazosin, a known α1-adrenoceptor antagonist. Vascul Pharmacol. 2003 Feb;40(2):97-108.