
Product Data Sheet

Product Name: QF0301B

Cat. No.: GC32631

Chemical Properties

Cas. No. 149247-12-1

SMILES O=C1C(CCN2CCN(C3=CC=CC=C3OC)CC2)CCC4=C1C=CC=C4Formula $C_{23}H_{28}N_2O_2$ M.Wt 364.48

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Protocol****Animal experiment:**

Rats: Normotensive rats are anaesthetized. When blood pressure and heart rate have stabilized (30 min after cannulation), vehicle (1 ml/kg), QF0301B, or prazosin solution (0.1-0.2 mg/kg) is injected intravenously via the femoral vein, and the effects on blood pressure and heart rate are observed[1].

Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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References:

[1]. Orallo F, et al. In vivo and in vitro pharmacological studies of a new hypotensive compound (QF0301B) in rat: Comparison with prazosin, a known α 1-adrenoceptor antagonist. *Vascul Pharmacol.* 2003 Feb;40(2):97-108.

Background

QF0301B is an α 1 adrenergic receptor antagonist and a low α 2 adrenoceptor, 5-HT_{2A}, and histamine H₁ receptor blocker.

In isolated rubbed rat aorta rings, QF0301B shows marked α 1-adrenoceptor blocking activity, with a pA₂ value of 9.00 ± 0.12 . QF0301B reverses and competitively antagonizes the inhibitory action produced by clonidine in electrically stimulated rat vas deferens and 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) and 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, or as Ca²⁺ antagonist[1].

QF0301B (0.1-0.2 mg/kg iv) can cause a pronounced and prolonged fall in mean arterial blood pressure accompanied by bradycardia. QF0301B does not significantly modify the cardiovascular effects of either 5-hydroxytryptamine (serotonin, 5-HT, 75 mg/kg iv) or the selective α 2-adrenoceptor agonist B-HT 920 (0.2 mg/kg iv), but markedly inhibits the hypertensive effect of noradrenaline (5 mg/kg iv), a nonselective α -adrenergic receptor agonist[1].

[1]. Orallo F, et al. In vivo and in vitro pharmacological studies of a new hypotensive compound (QF0301B) in rat: Comparison with prazosin, a known α 1-adrenoceptor antagonist. *Vascul Pharmacol.* 2003 Feb;40(2):97-108.

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