

# Blonanserin

Catalog No: tcsc2470



## Available Sizes

**Size:** 10mg

**Size:** 25mg

**Size:** 100mg



## Specifications

**CAS No:**

132810-10-7

**Formula:**

$C_{23}H_{30}FN_3$

**Pathway:**

GPCR/G Protein;Neuronal Signaling;Neuronal Signaling;GPCR/G Protein

**Target:**

Dopamine Receptor;Dopamine Receptor;5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

AD-5423

**Observed Molecular Weight:**

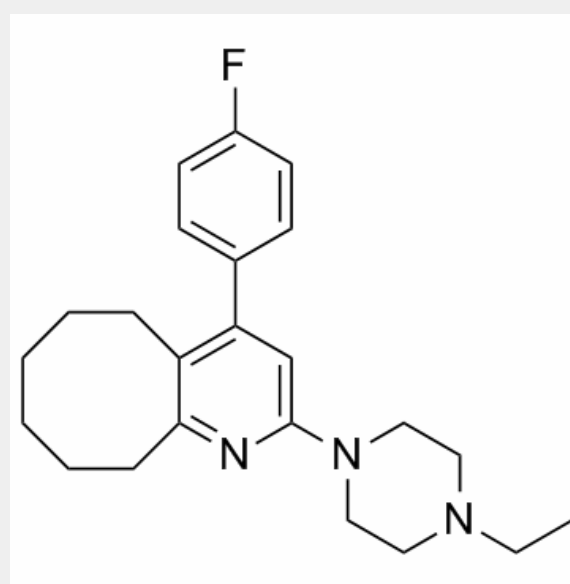
367.5

## Product Description

Blonanserin(AD-5423) is a D2/5-HT2 receptor antagonist, atypical antipsychotic.

Target: D2 receptor; 5-HT2 receptor

Blonanserin(AD-5423) is a relatively new atypical antipsychotic for the treatment of schizophrenia. Blonanserin belongs to a series of 4-phenyl-2-(1-piperazinyl)pyridines and acts as an antagonist at dopamine D2, D3, and serotonin 5-HT2A receptors. Blonanserin has low affinity for 5-HT2C, adrenergic  $\alpha$ 1, histamine H1, and muscarinic M1 receptors, but displays relatively high affinity for 5-HT6 receptors [1]. AD-5423 bound preferentially to dopamine (DA)-D2 ( $K_i$ , 14.8 nM; cf. haloperidol, 8.79 nM; and clozapine, 149 nM) and serotonin (5-HT)-S2 ( $K_i$ , 3.98 nM; cf. haloperidol, 26.8 nM; and clozapine, 8.66 nM) receptors. It displayed low affinity for adrenaline (Ad)- $\alpha$ -1 ( $K_i$ , 56.3 nM) receptors and was virtually devoid of binding to DA-D1 ( $K_i$ , 2870 nM), 5-HT-S3, Ad- $\alpha$ -2, Ad- $\beta$ , muscarine, tau-aminobutyric acid and benzodiazepine receptors. In addition, AD-5423 was only a weak inhibitor of DA, 5-HT and noradrenaline uptake systems. AD-5423 (0.2-2 mg/kg p.o.) decreased exploratory activity in mice. AD-5423 (10 mg/kg p.o.), unlike haloperidol, did not antagonize SKF38393-induced vacuous oral movements in rats. Head twitches induced by 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane in mice and by para-chloroamphetamine in rats were antagonized by AD-5423 at much lower doses (0.5-2 mg/kg p.o.) than those of haloperidol and clozapine [2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!