Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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

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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 α1, histamine H1, and muscarinic M1 receptors, but displays relatively high affinity for 5-HT6 receptors [1]. AD-5423 bound preferentially to dopamine (DA)-D2 (Ki, 14.8 nM; cf. haloperidol, 8.79 nM; and clozapine, 149 nM) and serotonin (5-HT)-S2 (Ki, 3.98 nM; cf. haloperidol, 26.8 nM; and clozapine, 8.66 nM) receptors. It displayed low affinity for adrenaline (Ad)-alpha-1 (Ki, 56.3 nM) receptors and was virtually devoid of binding to DA-D1 (Ki, 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].