

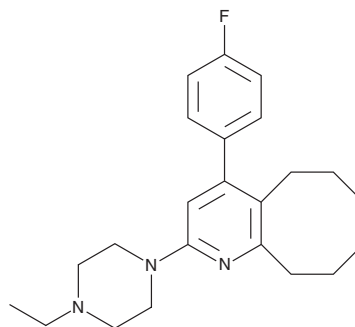
PRODUCT INFORMATION



Blonanserin

Item No. 16480

CAS Registry No.: 132810-10-7
Formal Name: 2-(4-ethyl-1-piperazinyl)-4-(4-fluorophenyl)-5,6,7,8,9,10-hexahydro-cycloocta[b]pyridine
Synonyms: AD5423, Lonasen
MF: C₂₃H₃₀FN₃
FW: 367.5
Purity: ≥98%
UV/Vis.: λ_{max}: 236, 315 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Blonanserin is supplied as a crystalline solid. A stock solution may be made by dissolving the blonanserin in the solvent of choice, which should be purged with an inert gas. Blonanserin is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of blonanserin in these solvents is approximately 10 and 15 mg/ml, respectively.

Description

Blonanserin is a 4-phenyl-2-(1-piperazinyl) pyridine that acts as an antagonist at dopamine D₂, D₃, and serotonin 5-HT_{2A} receptors (K_is = 0.14, 0.49, and 0.81 nM, respectively).¹ It binds to 5-HT₆ with a K_i value of 11.7 nM and demonstrates relatively low affinity for 5-HT_{2C} (K_i = 26.4 nM), adrenergic α₁ (K_i = 26.7 nM), histamine H₁ (K_i = 765 nM), and muscarinic M₁ receptors (K_i = 100 nM).¹ Blonanserin was developed in Japan as a novel antipsychotic that displays 20- and 94-fold higher affinity for D₂ receptors compared to haloperidol (Item No. 12014) and risperidone (Item No. 13629), respectively.¹

Reference

1. Tenjin, T., Miyamoto, S., Ninomiya, Y., *et al.* Profile of blonanserin for the treatment of schizophrenia. *Neuropsychiatr. Dis. Treat.* **9**, 587-594 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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