

PRODUCT INFORMATION



Bifeprunox (mesylate)

Item No. 29523

CAS Registry No.: 350992-13-1

Formal Name: 7-[4-([1,1'-biphenyl]-3-ylmethyl)-1-piperazinyl]-2(3H)-benzoxazolone, monomethanesulfonate

Synonym: DU 127090

MF: C₂₄H₂₃N₃O₂ • CH₃SO₃H

FW: 481.6

Purity: ≥98%

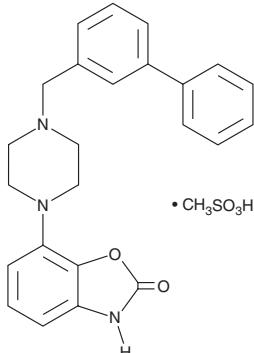
UV/Vis.: λ_{max}: 248 nm

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

Bifeprunox (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the bifeprunox (mesylate) in the solvent of choice, which should be purged with an inert gas. Bifeprunox (mesylate) is soluble in the organic solvent DMSO.

Description

Bifeprunox is an atypical antipsychotic.¹ It is a dopamine D₂ receptor partial agonist and an agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} (K_{1/2} = 2.2 and 9.3 nM, respectively).^{2,3} Bifeprunox inhibits apomorphine-induced climbing behavior in mice (ED₅₀ = 0.1 mg/kg) and the conditioned avoidance response in rats (ED₅₀ = 0.8 mg/kg).² It decreases basal prepulse inhibition of the acoustic startle response in rats by 42% when administered at a dose of 10 mg/kg.³

References

1. Wadenberg, M.-L.G. Bifeprunox: A novel antipsychotic agent with partial agonist properties at dopamine D₂ and serotonin 5-HT_{1A} receptors. *Future Neurol.* **2**(2), 153-165 (2007).
2. Feenstra, R.W., de Moes, J., Hofma, J.J., et al. New 1-aryl-4-(biaryl)methylene)piperazines as potential atypical antipsychotics sharing dopamine D₂-receptor and serotonin 5-HT_{1A}-receptor affinities. *Bioorg. Med. Chem. Lett.* **11**(17), 2345-2349 (2001).
3. Auclair, A.L., Galinier, A., Besnard, J., et al. Putative antipsychotics with pronounced agonism at serotonin 5-HT1A and partial agonist activity at dopamine D2 receptors disrupt basal PPI of the startle reflex in rats. *Psychopharmacol. (Berl.)* **193**(1), 45-54 (2007).

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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