

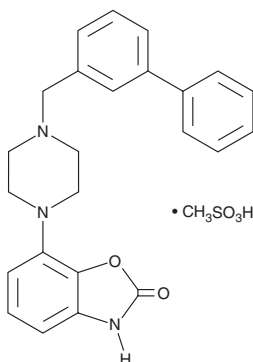
PRODUCT INFORMATION



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_{iS} = 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-(biarylmethylene)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-HT_{1A} 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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/25/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM