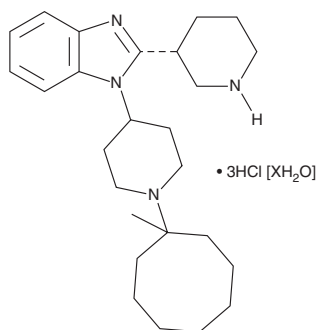


PRODUCT INFORMATION

MCOPPB (hydrochloride hydrate)

Item No. 12037

Formal Name: 1-[1-(1-methylcyclooctyl)-4-piperidiny]-2-[(3R)-3-piperidiny]-1H-benzimidazole, trihydrochloride, hydrate
MF: C₂₆H₄₀N₄ • 3HCl • XH₂O
FW: 536.0
Purity: ≥98%
UV/Vis.: λ_{max}: 252, 275, 283 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

MCOPPB (hydrochloride hydrate) is supplied as a solid. A stock solution may be made by dissolving the MCOPPB (hydrochloride hydrate) in water. The solubility of MCOPPB (hydrochloride hydrate) in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The nociceptin/orphanin FQ peptide (NOP, ORL1, or OP₄) receptor is a member of the opioid family of receptors that integrates the emotional components of anxiety, fear, and stress. MCOPPB is a potent agonist for the NOP receptor (pK_i = 10.1, EC₅₀ = 0.39 nM) with 12-, 270-, and >1,000-fold selectivity over the μ-, κ-, and δ-opioid receptors.^{1,2} In rodents, MCOPPB at 10 mg/kg, p.o. produces potent anxiolytic effects, without inhibiting memory or motor function or inducing sedative side effects.¹ This product is intended for research purposes only.

References

- Hirao, A., Imai, A., Sugie, Y., *et al.* Pharmacological characterization of the newly synthesized nociceptin/orphanin FQ-receptor agonist 1-[1-(1-methylcyclooctyl)-4-piperidiny]-2-[(3R)-3-piperidiny]-1H-benzimidazole as an anxiolytic agent. *J. Pharmacol. Sci.* **106**, 361-368 (2008).
- Hayashi, S., Hirao, A., Imai, A., *et al.* Novel non-peptide nociceptin/orphanin FQ receptor agonist, 1-[1-(1-methylcyclooctyl)-4-piperidiny]-2-[(3R)-3-piperidiny]-1H-benzimidazole: Design, synthesis, and structure-activity relationship of oral receptor occupancy in the brain for orally potent antianxiety drug. *J. Med. Chem.* **52**, 610-625 (2009).

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

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