

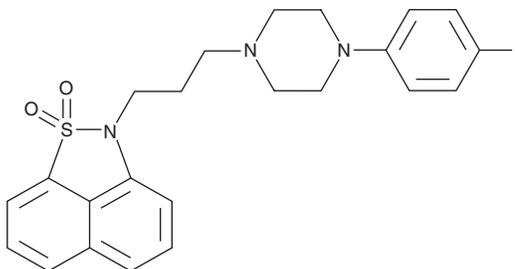
PRODUCT INFORMATION



Fananserin

Item No. 33216

CAS Registry No.: 127625-29-0
Formal Name: 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2H-naphth[1,8-cd]isothiazole, 1,1-dioxide
Synonym: RP-62203
MF: C₂₃H₂₄FN₃O₂S
FW: 425.5
Purity: ≥98%
Supplied as: A 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

Fananserin is supplied as a solid. A stock solution may be made by dissolving the fananserin in the solvent of choice, which should be purged with an inert gas. Fananserin is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Fananserin is an antagonist of the serotonin (5-HT) receptor subtype 5-HT₂ (IC₅₀ = 0.12 nM for the rat receptor).¹ It is selective for 5-HT₂ over 5-HT_{1A}, 5-HT₃, the α₁-adrenergic receptor (α₁-AR), dopamine D₂ receptor (IC₅₀s = 75, 6,600, 4.3, and 390 nM, respectively, for the rat receptors), and histamine H₁ receptor (IC₅₀ = 50 nM for the guinea pig receptor). Fananserin is also an antagonist of the dopamine D₄ receptor (K_i = 2.93 nM for the human receptor).² It inhibits the head-twitch response (HTR) induced by mescaline in mice (ED₅₀ = 0.16 mg/kg). Fananserin (2 or 4 mg/kg) increases time in deep non-rapid eye movement (NREM) sleep and decreases time in light NREM sleep in rats.³ It increases the time spent in the open arms of the elevated plus maze in mice when administered at doses of 0.25, 1, or 4 mg/kg.⁴

References

1. Doble, A., Girdlestone, D., Piot, O., *et al.* Pharmacological characterization of RP 62203, a novel 5-hydroxytryptamine 5-HT₂ receptor antagonist. *Br. J. Pharmacol.* **105**(1), 27-36 (1992).
2. Heuillet, E., Petitet, F., Mignani, S., *et al.* The naphtosultam derivative RP 62203 (fananserin) has high affinity for the dopamine D₄ receptor. *Eur. J. Pharmacol.* **314**(1-2), 229-233 (1996).
3. Stutzmann, J.M., Eon, B., Lucas, M., *et al.* RP 62203, a 5-hydroxytryptamine₂ antagonist, enhances deep NREM sleep in rats. *Sleep* **15**(2), 119-24 (1992).
4. Stutzmann, J.M., Eon, B., Darche, F., *et al.* Are 5-HT₂ antagonists endowed with anxiolytic properties in rodents? *Neurosci. Lett.* **128**(1), 4-8 (1991).

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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