

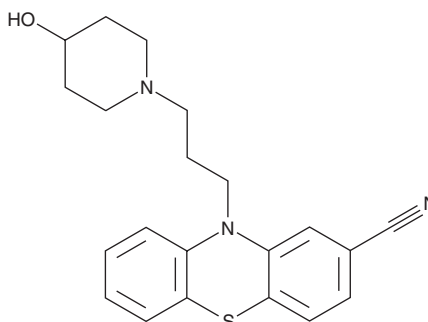
PRODUCT INFORMATION



Periciazine

Item No. 33149

CAS Registry No.: 2622-26-6
Formal Name: 10-[3-(4-hydroxy-1-piperidinyl)propyl]-10H-phenothiazine-2-carbonitrile
Synonyms: Propericiazine, RP 8909, SKF 20,716
MF: C₂₁H₂₃N₃OS
FW: 365.5
Purity: ≥98%
UV/Vis.: λ_{max}: 232, 273 nm
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

Periciazine is supplied as a solid. A stock solution may be made by dissolving the periciazine in the solvent of choice, which should be purged with an inert gas. Periciazine is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml. Periciazine is slightly soluble in chloroform and methanol.

Description

Periciazine is a typical antipsychotic.¹ It binds to the dopamine D₁ receptor and androgen receptor (K_is = 0.01 and 3 μM, respectively).^{1,2} Periciazine is an α₁-adrenergic receptor (α₁-AR) antagonist (IC₅₀ = 0.0041 μM in rat forebrain homogenates), as well as an α₂-AR antagonist (IC₅₀ = 2 μM in rat cortical homogenates).³ It also inhibits severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) main protease (M^{Pro}) activity by 55% when used at a concentration of 100 μM.⁴ Periciazine (0.075 mg/kg) increases the number of entries into, and the percentage of time spent in, the open arms of the elevated plus maze in rats, indicating anxiolytic-like activity.⁵ Formulations containing periciazine have been used in the treatment of schizophrenia and psychosis.

References

1. Kanba, S., Suzuki, E., Nomura, S., *et al.* Affinity of neuroleptics for D₁ receptor of human brain striatum. *J. Psychiatry Neurosci.* **19(4)**, 265-269 (1994).
2. Bisson, W.H., Cheltsov, A.V., Bruey-Sedano, N., *et al.* Discovery of antiandrogen activity of nonsteroidal scaffolds of marketed drugs. *Proc. Nat. Acad. Sci. USA* **104(29)**, 11927-11932 (2007).
3. Megens, A.A.H.P., Leysen, J.E., Awouters, F.H.L., *et al.* Further validation of in vivo and in vitro pharmacological procedures for assessing the α₂/α₁-selectivity of test compounds: (1) α-adrenoceptor antagonists. *Eur. J. Pharmacol.* **129(1-2)**, 49-55 (1986).
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5. Cechin, E.M., Quevedo, J., Barichello, T., *et al.* Dose-related effects of propericiazine in rats. *Braz. J. Med. Biol. Res.* **36(2)**, 227-231 (2003).

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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