

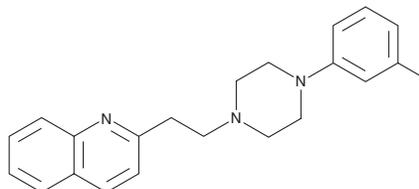
PRODUCT INFORMATION



Centhaquin

Item No. 36929

CAS Registry No.: 57961-90-7
Formal Name: 2-[2-[4-(3-methylphenyl)-1-piperazinyl]ethyl]-quinoline
Synonyms: Centhaquine, PMZ-2010
MF: C₂₂H₂₅N₃
FW: 331.5
Purity: ≥98%
UV/Vis.: λ_{max}: 227 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

Centhaquin is supplied as a solid. A stock solution may be made by dissolving the centhaquin in the solvent of choice, which should be purged with an inert gas. Centhaquin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of centhaquin in ethanol is approximately 30 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

Centhaquin is a resuscitative agent.¹ It binds to serotonin (5-HT) receptors in isolated rat cerebral cortex and brainstem membranes (K_s = 178.9 and 103.7 nM, respectively).² Centhaquin (0.05-0.45 mg/kg) increases the latency to tail-flick in mice, an effect that can be reversed by the α_{2A}-adenergetic receptor (α_{2A}-AR) antagonist BRL 44408 (Item No. 29454) and α_{2B}-AR antagonist imiloxan but not the α_{2C}-AR antagonist JP-1302 (Item No. 25974).³ It increases mean arterial blood pressure (MAP), cardiac output, and survival following bleeding-induced hypotension in a rat model of hemorrhagic shock when administered at doses ranging from 0.006 to 0.05 mg/kg in combination with hypertonic saline.¹

References

1. Gulati, A., Lavhale, M.S., Garcia, D.J., *et al.* Centhaquin improves resuscitative effect of hypertonic saline in hemorrhaged rats. *J. Surg. Res.* **178(1)**, 415-423 (2012).
2. Gulati, A., Arora, R.C., and Crayton, J. Central serotonergic uptake mechanisms in hypertensive rats: Effects of clonidine and centhaquin. *Eur. J. Pharmacol.* **231(2)**, 151-156 (1993).
3. Bhalla, S., Ali, I., Andurkar, S.V., *et al.* Centhaquin antinociception in mice is mediated by α_{2A}- and α_{2B}- but not α_{2C}-adrenoceptors. *Eur. J. Pharmacol.* **715(1-3)**, 328-336 (2013).

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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