

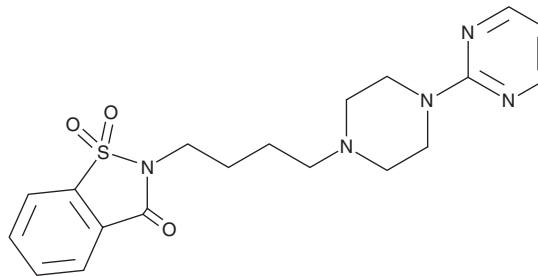
PRODUCT INFORMATION



Ipsapirone

Item No. 39918

CAS Registry No.: 95847-70-4
Formal Name: 2-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-1,2-benzisothiazol-3(2H)-one, 1,1-dioxide
MF: C₁₉H₂₃N₅O₃S
FW: 401.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ipsapirone is supplied as a solid. A stock solution may be made by dissolving the ipsapirone in the solvent of choice, which should be purged with an inert gas. Ipsapirone is soluble in organic solvents such as methanol and chloroform.

Description

Ipsapirone is a partial agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} (K_i = 10 nM in hippocampal membranes).¹ It reduces 5-HT release in the rat ventral hippocampus *in vivo*.² Low doses of ipsapirone decrease, while high doses increase, extracellular dopamine release in the murine nucleus accumbens.³ Extracellular dopamine levels in the murine striatum increase following administration of ipsapirone at concentrations greater than 0.1 mg/kg. Ipsapirone has anxiolytic effects *in vivo*, inhibiting foot shock-induced aggression and passive avoidance behavior in rats (ED₅₀s = 2.2 and 0.5 mg/kg, respectively).⁴ Formulations containing ipsapirone have been used in the treatment of depression and borderline personality disorder.⁵

References

1. Glaser, T. and Traber, J. Binding of the putative anxiolytic TVX Q 7821 to hippocampal 5-hydroxytryptamine (5-HT) recognition sites. *Naunyn Schmiedebergs Arch. Pharmacol.* **329(3)**, 211-215 (1985).
2. Sharp, T., Bramwell, S.R., and Grahame-Smith, D.G. 5-HT₁ agonists reduce 5-hydroxytryptamine release in rat hippocampus *in vivo* as determined by brain microdialysis. *Br. J. Pharmacol.* **96(2)**, 283-290 (1989).
3. Ichikawa, J. and Meltzer, H.Y. The effect of ipsapirone and S(-)-pindolol on dopamine release in rat striatum and nucleus accumbens. *Brain Res.* **842(2)**, 445-451 (1999).
4. Traber, J., Davies, M.A., Dompert, W.U., *et al.* Brain serotonin receptors as a target for the putative anxiolytic TVX Q 7821. *Brain Res. Bull.* **12(6)**, 741-744 (1984).
5. Rausch, J.L., Johnson, M.E., Kasik, K.E., *et al.* Temperature regulation in depression: Functional 5HT_{1A} receptor adaptation differentiates antidepressant response. *Neuropsychopharmacology* **31(10)**, 2274-2280 (2006).

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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