

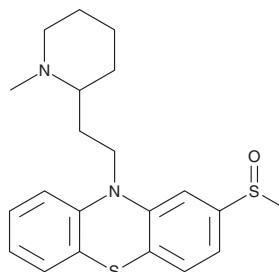
# PRODUCT INFORMATION



## Mesoridazine

Item No. 31370

**CAS Registry No.:** 5588-33-0  
**Formal Name:** 10-[2-(1-methyl-2-piperidiny)ethyl]-2-(methylsulfinyl)-10H-phenothiazine  
**Synonym:** NSC 186066  
**MF:** C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>OS<sub>2</sub>  
**FW:** 386.6  
**Purity:** ≥95%  
**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

Mesoridazine is supplied as a solid. A stock solution may be made by dissolving the mesoridazine in the solvent of choice, which should be purged with an inert gas. Mesoridazine is slightly soluble in DMSO (warmed), methanol, and acetonitrile.

### Description

Mesoridazine is an active metabolite of the typical antipsychotic thioridazine (Item No. 14400).<sup>1,2</sup> It is formed via sulfoxidation of thioridazine by the cytochrome P450 (CYP) isoform CYP2D6 in human liver microsomes.<sup>3</sup> It binds to histamine H<sub>1</sub>, dopamine D<sub>2</sub>, muscarinic acetylcholine, and α<sub>1</sub>- and α<sub>2</sub>-adrenergic receptors (K<sub>d</sub>s = 1.8, 19, 69, 2, and 1,600 nM, respectively).<sup>2</sup> Mesoridazine (10, 30, and 45 mg/kg, i.p.) prevents mescaline-induced hyperactivity in mice.<sup>4</sup>

### References

1. von Bahr, C., Movin, G., Nordin, C., *et al.* Plasma levels of thioridazine and metabolites are influenced by the debrisoquin hydroxylation phenotype. *Clin. Pharmacol. Ther.* **49(3)**, 234-240 (1991).
2. Richelson, E. and Nelson, A. Antagonism by neuroleptics of neurotransmitter receptors of normal human brain in vitro. *Eur. J. Pharmacol.* **103(3-4)**, 197-204 (1984).
3. Wójcikowski, J., Maurel, P., and Daniel, W.A. Characterization of human cytochrome P450 enzymes involved in the metabolism of the piperidine-type phenothiazine neuroleptic thioridazine. *Drug Metab. Dispos.* **34(3)**, 471-476 (2006).
4. Shah, N.S. Influence of psychotropic drugs and β-diethylaminoethyl-diphenylpropylacetate (SKF 525-A) on mescaline-induced behavior and on tissue levels of mescaline in mice. *Biochem. Pharmacol.* **25(5)**, 591-597 (1976).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM