



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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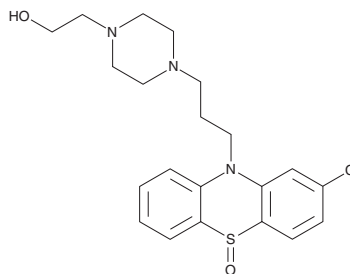
# PRODUCT INFORMATION



## Perphenazine Sulfoxide

Item No. 35801

**CAS Registry No.:** 10078-25-8  
**Formal Name:** 4-[3-(2-chloro-5-oxido-10H-phenothiazin-10-yl)propyl]-1-piperazineethanol  
**MF:** C<sub>21</sub>H<sub>26</sub>ClN<sub>3</sub>O<sub>2</sub>S  
**FW:** 420.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 239, 278 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

Perphenazine sulfoxide is supplied as a solid. A stock solution may be made by dissolving the perphenazine sulfoxide in the solvent of choice, which should be purged with an inert gas. Perphenazine sulfoxide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of perphenazine sulfoxide in DMSO is approximately 2 mg/ml and approximately 3 mg/ml in ethanol and DMF.

### Description

Perphenazine sulfoxide is an active metabolite of the typical antipsychotic perphenazine (Item No. 20735).<sup>1</sup> It is formed *via* oxidation of perphenazine. Perphenazine sulfoxide selectively binds to dopamine D<sub>2</sub> and α<sub>1</sub>-adrenergic receptors (α<sub>1</sub>-ARs) over α<sub>2</sub>-ARs (K<sub>i</sub>s= 5.9, 24, and 683 nM, respectively) in rat brain.<sup>2</sup> It increases thrombin-induced increases in phosphatidylinositol levels in isolated human platelets when used at a concentration of 5 μM.<sup>3</sup>

### References

1. Olesen, O.V. and Linnet, K. Identification of the human cytochrome P450 isoforms mediating *in vitro* N-dealkylation of perphenazine. *Br. J. Clin. Pharmacol.* **50(6)**, 563-571 (2008).
2. Hals, P.A., Hall, H., and Dahl, S.G. Phenothiazine drug metabolites: Dopamine D<sub>2</sub> receptor, α<sub>1</sub>- and α<sub>2</sub>-adrenoceptor binding. *Eur. J. Pharmacol.* **125(3)**, 373-381 (1986).
3. Tharmapathy, P., Fukami, M.H., and Holmsen, H. The stimulatory effects of cationic amphiphilic drugs on human platelets treated with thrombin. *Biochem. Pharmacol.* **60(9)**, 1267-1277 (2000).

#### 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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