

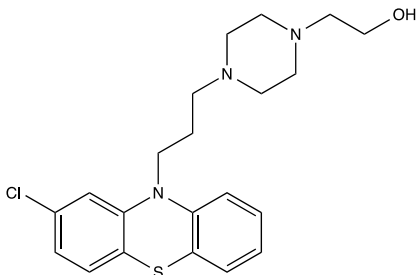
Catalog # 10-4709

Perphenazine

CAS# 58-39-9

2-[4-[3-(2-Chlorophenothiazin-10-yl)propyl]piperazin-1-yl]ethanol

Lot # FBS1029



Perphenazine is a clinically useful typical antipsychotic drug. The therapeutic mode of action is not well understood but it binds to a wide variety of receptors including serotonin, histamine, dopamine, and α -adrenergic.¹ Perphenazine is an inhibitor of acid sphingomyelinase(ASM)² and positively effected xenografted tumor growth *via* perturbation of intracellular cholesterol transport through ASM³. It has also been shown to be an inhibitor of glutamate dehydrogenase.⁴

- 1) Kroeze *et al.* (2003), *H1-Histamine Receptor Affinity Predicts Short-Term Weight Gain for Typical and Atypical Antipsychotic Drugs*; *Neuropharmacology* **28** 519
- 2) Kornhuber *et al.* (2011), *Identification of Novel Functional Inhibitors of Acid Sphingomyelinase*; *PLoS One* **6** e23852
- 3) Kuzu *et al.* (2017), *Modulating cancer cell survival by targeting intracellular cholesterol transport*; *Br. J. Cancer* epub ahead of print
- 4) Couee and Tipton (1990), *Inhibition of ox brain glutamate by perphenazine*; *Biochem. Pharmacol.* **39** 1167

PHYSICAL DATA

Molecular Weight:	403.98
Molecular Formula:	C ₂₁ H ₂₆ ClN ₃ OS
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (20 mg/mL) and ethanol (5mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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