

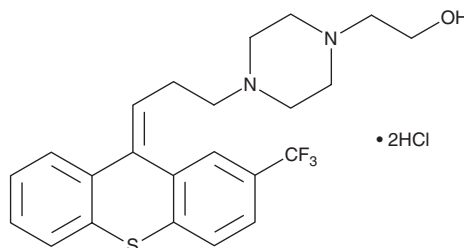
# PRODUCT INFORMATION



## cis-Flupenthixol (hydrochloride)

Item No. 17634

**CAS Registry No.:** 51529-01-2  
**Formal Name:** 4-[3-[(3Z)-2-(trifluoromethyl)-9H-thioxanthen-9-ylidene]propyl]-1-piperazineethanol, dihydrochloride  
**Synonym:** cis-Flupenthixol  
**MF:** C<sub>23</sub>H<sub>25</sub>F<sub>3</sub>N<sub>2</sub>OS • 2HCl  
**FW:** 507.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 230 nm  
**Supplied as:** A crystalline 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

cis-Flupenthixol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the cis-flupenthixol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. cis-Flupenthixol (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of cis-flupenthixol (hydrochloride) in these solvents is approximately 1, 25, and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of cis-flupenthixol (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of cis-flupenthixol (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

cis-Flupenthixol is a typical antipsychotic, a dopamine D<sub>2</sub> receptor antagonist (K<sub>i</sub> = 0.38 nM), and an inverse agonist at the serotonin (5-HT) receptor subtype 5-HT<sub>2A</sub> (K<sub>i</sub> = 7 nM).<sup>1</sup> *In vivo*, cis-flupenthixol (0.5 mg/kg, i.p.) reduces cocaine-induced locomotor activity and prevents development of conditioned place preferences for the immediate effects of intravenously administered cocaine without affecting development of conditioned place aversions in rats.<sup>2</sup> cis-Flupenthixol also inhibits acid sphingomyelinase activity by 81.8% when used at a concentration of 10 mM.<sup>3</sup>

### References

- Seeman, P. Atypical antipsychotics: Mechanism of action. *Can. J. Psychiatry* **47**(1), 27-38 (2002).
- Wenzel, J.M., Su, Z.I., Shelton, K., *et al.* The dopamine antagonist cis-flupenthixol blocks the expression of the conditioned positive but not the negative effects of cocaine in rats. *Pharmacol. Biochem. Behav.* **114-115**, 90-96 (2013).
- Kornhuber, J., Muehlbacher, M., Trapp, S., *et al.* Identification of novel functional inhibitors of acid sphingomyelinase. *PLoS One* **6**(8), 1-13 (2011).

#### 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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