

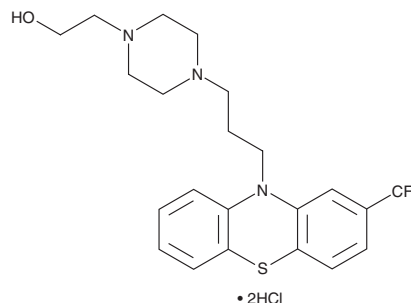
PRODUCT INFORMATION



Fluphenazine (hydrochloride)

Item No. 23555

CAS Registry No.: 146-56-5
Formal Name: 4-[3-[2-(trifluoromethyl)-10H-phenothiazin-10-yl]propyl]-1-piperazineethanol, dihydrochloride
Synonym: SQ 4,918
MF: C₂₂H₂₆F₃N₃OS • 2HCl
FW: 510.4
Purity: ≥95%
UV/Vis.: λ_{max}: 259, 311 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

Fluphenazine is supplied as a crystalline solid. A stock solution may be made by dissolving the fluphenazine in the solvent of choice, which should be purged with an inert gas. Fluphenazine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of fluphenazine in these solvents is approximately 5, 20, and 30 mg/ml, respectively.

Description

Fluphenazine is a dopamine D₁ and D₂ receptor antagonist (K_is = 5 and 0.63 nM, respectively) and an active metabolite of fluphenazine decanoate (Item No. 39903).¹ It also binds to histamine H₁, serotonin 5-HT_{2A}, and 5-HT_{2B} receptors (K_is = 45, 17, and 82 nM, respectively).² It acts as an inverse agonist at H₁ and 5-HT_{2A} receptors.^{2,3} Fluphenazine is a typical antipsychotic compound. It induces extrapyramidal symptoms in animal models, including monkeys.⁴ Formulations containing fluphenazine have been used in the management of psychotic disorders.

References

1. Meltzer, H.Y., Matsubara, S., and Lee, J.-C. Classification of typical and atypical antipsychotic drugs on the basis of dopamine D-1, D-2 and serotonin₂ pK_i values. *J. Pharmacol. Exp. Ther.* **251(1)**, 238-246 (1989).
2. Weiner, D.M., Burstein, E.S., Nash, N.R., et al. 5-hydroxytryptamine_{2A} receptor inverse agonists as antipsychotics. *J. Pharmacol. Exp. Ther.* **299(1)**, 268-276 (2001).
3. Appl, H., Holzammer, T., Dove, S., et al. Interactions of recombinant human histamine H₁, H₂, H₃, and H₄ receptors with 34 antidepressants and antipsychotics. *Maunyn-Schmiedeberg's Arch. Pharmacol.* **385(2)**, 145-170 (2012).
4. Kovacic, B. and Domino, E.F. Fluphenazine-induced acute and tardive dyskinesias in monkeys. *Psychopharmacology (Berl.)* **84(3)**, 310-314 (1984).

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