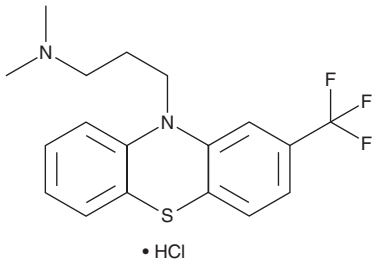
PRODUCT INFORMATION

Triflupromazine (hydrochloride)

Item No. 27610

CAS Registry No.:	1098-60-8
Formal Name:	N,N-dimethyl-2-(trifluoromethyl)-10H-phenothiazine-10-propanamine, monohydrochloride
Synonym:	Siquil
MF:	$C_{18}H_{19}F_3N_2S \bullet HCl$
FW:	388.9
Purity:	≥98%
UV/Vis.:	λ_{max}: 259, 308 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

Triflupromazine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the triflupromazine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Triflupromazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of triflupromazine (hydrochloride) in ethanol and DMF is approximately 5 mg/ml and approximately 3 mg/ml in DMSO.

Triflupromazine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, triflupromazine (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Triflupromazine (hydrochloride) has a solubility of approximately 0.09 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Triflupromazine is a phenothiazine with diverse biological activities.[1-4] It binds to muscarinic receptors in isolated rat corpus striatum (IC_{50} = 100 µM in a radioligand binding assay).[1] Triflupromazine inhibits serotonin (5-HT) uptake by isolated rat brainstem synaptosomes (IC_{50} = 0.8 µM).[2] It inhibits *T. cruzi* infection in mouse peritoneal macrophages when used at a concentration of 12.5 µM.[3] Triflupromazine is active against *S. aureus*, shigellae, and vibrios (MICs = 2-100 µg/ml) *in vitro* and is protective against *S. typhimurium* infection in mice when administered at a dose of 30 µg per animal.[4] Formulations containing triflupromazine were previously used as antipsychotics.

References

1. Snyder, S.H., Greenberg, D., and Yamumura, H.I. Antischizophrenic drugs: Affinity for muscarinic cholinergic receptor sites in the brain predicts extrapyramidal effects. *J. Psychiatr. Res.* **11**, 91-95 (1974).
2. Tuomisto, J. A new modification for studying 5-HT uptake by blood platelets: A re-evaluation of tricyclic antidepressants as uptake inhibitors. *J. Pharm. Pharmacol.* **26(2),** 92-100 (1974).
3. De Castro, S.L., Soeiro, M.N., and De Meirelles Mde, N. *Trypanosoma cruzi*: Effect of phenothiazines on the parasite and its interaction with host cells. *Mem. Inst. Oswaldo Cruz* **87(2),** 209-215 (1992).
4. Dastidar, S.G., Debnath, S., Mazumdar, K., *et al.* Triflupromazine: A microbicide non-antibiotic compound. *Acta Microbiol. Immuno. Hung.* **51(1-2),** 75-83 (2004).

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