Data Sheet (Cat.No.T0362)

TargetMol

Ticlopidine hydrochloride

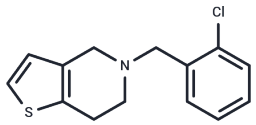
Chemical Properties

CAS No. : 53885-35-1

Formula: C14H15Cl2NS

Molecular Weight: 300.25

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Ticlopidine hydrochloride (Ticlodix) is an effective inhibitor of platelet aggregation commonly used in the placement of STENTS in CORONARY ARTERIES.
Targets(IC50)	Adenosine Receptor
In vitro	Oral administration of Ticlopidine HCl in rats enhances the affinity of cyclase on platelet membranes for prostaglandin E1, subsequently activating both the basal and prostaglandin E1-stimulated without affecting the enzyme activity induced by adenosine or sodium fluoride. Ticlopidine HCl exhibits an inhibitory effect on platelet aggregation with an IC50 of 2 μM in males.
In vivo	Ticlopidine HCl inhibits platelet aggregation by activating basal PGE1-induced cyclase activity, blocking the enhancement of cyclase activity induced by PGE2, thereby increasing platelet c-AMP levels, and suppressing prostaglandin synthesis from endogenous substrates. Additionally, it alters platelet membrane function and inhibits aggregation through the blockade of ADP receptors.

Solubility Information

Solubility	H2O: 30 mg/mL (99.92 mM),Sonication is recommended. DMSO: 65 mg/mL (216.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3306 mL	16.6528 mL	33.3056 mL
5 mM	0.6661 mL	3.3306 mL	6.6611 mL
10 mM	0.3331 mL	1.6653 mL	3.3306 mL
50 mM	0.0666 mL	0.3331 mL	0.6661 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Thebault JJ, et al. Clin Pharmacol Ther, 1975, 18(4), 485-490.
Ashida SI, et al. Thromb Haemost, 1979, 41(2), 436-449.