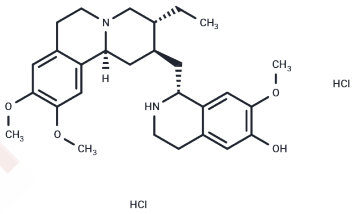
Data Sheet (Cat.No.TQ0109)

TargetMol

Cephaeline dihydrochloride

Chemical Properties



CAS No. :	5853-29-2
Formula:	C28H40Cl2N2O4
Molecular Weight:	539.53
Storage:	Keep away from moisture,Keep away from direct sunlight 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	Cephaeline dihydrochloride is a naturally occurring alkaloid that is a selective CYP2D6 inhibitor with an IC50=121 μM. It has an affinity for and oral activity at the 5-HT4 receptor and is capable of inducing vomiting.
Targets(IC50)	5-HT Receptor,Cytochromes P450
In vitro	In human liver microsome assays, Cephaeline dihydrochloride demonstrated weak inhibition of major cytochrome P450 (CYP) enzymes. Specifically, Cephaeline dihydrochloride inhibited CYP2D6 with an IC_{50} of 121μM and a Ki of 54μM via competitive inhibition, and CYP3A4 with an IC_{50} of 1000μM and a Ki of 355μM via non-competitive inhibition[1].

Solubility Information

Solubility	DMSO: 200 mg/mL (370.69 mM),Sonication is recommended. H2O: 100 mg/mL (185.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8535 mL	9.2673 mL	18.5347 mL
5 mM	0.3707 mL	1.8535 mL	3.7069 mL
10 mM	0.1853 mL	0.9267 mL	1.8535 mL
50 mM	0.0371 mL	0.1853 mL	0.3707 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

Asano T, et al. Metabolism of ipecac alkaloids Cephaeline and Emetine by human hepatic microsomal cytochrome P450s, and their inhibitory effects on P450 enzyme activities. Biol Pharm Bull. 2001 Jun;24(6):678-82.