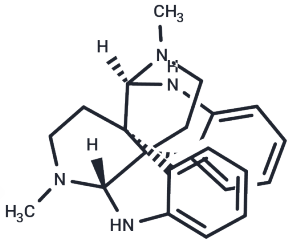
Data Sheet (Cat.No.TN1063)

TargetMol

Calycanthine

Chemical Properties



CAS No. : 595-05-1

Formula: C22H26N4

Molecular Weight: 346.47

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	Calycanthine is a natural alkaloid exhibiting central nervous system toxicity, capable of inducing convulsions and seizures.
Targets(IC50)	Others
In vitro	Calycanthine blocked the L-type calcium currents with an IC(50) of approximately 42 microM and also weakly inhibited the N-type calcium currents (IC(50) > 100 microM) from neuroblastoma X glioma cells, suggesting voltage-dependent calcium channel blockade as a possible mechanism for its inhibition of GABA and ACh release. Calycanthine was also found to directly inhibit GABA-mediated currents (K(B) approximately 135 microM) from human alpha(1)beta(2)gamma(2L) GABA(A) receptors expressed in Xenopus laevis oocytes but had no effect at 100 microM on human rho(1) GABA(c) receptors [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (230.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8863 mL	14.4313 mL	28.8625 mL
5 mM	0.5773 mL	2.8863 mL	5.7725 mL
10 mM	0.2886 mL	1.4431 mL	2.8863 mL
50 mM	0.0577 mL	0.2886 mL	0.5773 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

Chebib M, Duke RK, Duke CC, Connor M, Mewett KN, Johnston GA. Convulsant actions of calycanthine. Toxicol Appl Pharmacol. 2003 Jul 1;190(1):58-64.