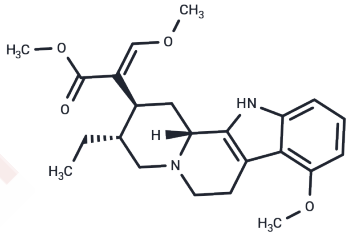
Data Sheet (Cat.No.T83913)

TargetMol

Mitraciliatine

Chemical Properties



CAS No. : 14509-92-3

Formula: C23H30N2O4

Molecular Weight: 398.50

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	Mitraciliatine, an alkaloid discovered in M. speciosa (Kratom in Thai), acts as a partial agonist for the μ-opioid receptor (MOR) and an agonist for the κ-opioid receptor (KOR), demonstrating selectivity for these receptors over the δ-opioid receptor (DOR) with EC50 values of 228, 218, and >1,000 nM respectively in mouse receptors through a GTPγS binding assay. When administered intracerebroventricularly (i.c.v.) at 100 nmol/animal, mitraciliatine increases latency to withdrawal in the warm water tail withdrawal assay in mice, an effect reversable by MOR knockout but unaffected by KOR knockout, distinguishing it from morphine by not causing hyperlocomotion or respiratory depression.
Targets(IC50)	Others

Solubility Information

Solubility	Ethanol: Soluble Methanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5094 mL	12.5471 mL	25.0941 mL
5 mM	0.5019 mL	2.5094 mL	5.0188 mL
10 mM	0.2509 mL	1.2547 mL	2.5094 mL
50 mM	0.0502 mL	0.2509 mL	0.5019 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481