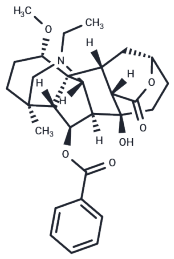
Data Sheet (Cat.No.TN6713)

TargetMol

6-Benzoylheteratisine

Chemical Properties



CAS No. : 99759-48-5

Formula: C29H37NO6

Molecular Weight: 495.61

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	6-Benzoylheteratisine (Heteratisan-14-one, 6-(benzoyloxy)-20-ethyl-8-hydroxy-1-methoxy-4-meth) is a Aconitum alkaloid. It can inhibits voltage-gated Na+ channels in rat brain synaptosomes
Targets(IC50)	Sodium Channel
In vitro	A concentration-dependent inhibitory effect of 6-benzoylheteratisine on aconitine-induced increases in [Na+]i, [Ca2+]i and the release of glutamate.?The IC50 values were 4.1 microM (Na+), 4.8 microM (Ca2+) and 4.8 microM (glutamate release).?Application of 100 microM 6-benzoylheteratisine after stimulation with 5 microM veratridine also reduced the induced [Na+]i and [Ca2+]i with half-lives of 72.1 and 44.7 s, respectively.?Furthermore, 100 microM 6-benzoylheteratisine reduced the ouabain-induced Na+ influx to the same extent as the Na+ channel inhibitor tetrodotoxin, which points to an inhibition of non-activated Na+ channels by 6-benzoylheteratisine.?Additionally, 100 microM 6-benzoylheteratisine failed to affect the release of glutamate and the increase in [Ca2+]i induced by 30 mM KCl, indicating that voltage-gated Ca2+ channels were not affected by 6-benzoylheteratisine.?The data suggest an inhibitory effect of 6-benzoylheteratisine on voltage-gated Na+ channels as the only target, whereas mechanisms of Na+ and Ca2+ homoeostasis and pathways of glutamate release seem not to be affected by the drug[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (50.44 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0177 mL	10.0886 mL	20.1772 mL
5 mM	0.4035 mL	2.0177 mL	4.0354 mL
10 mM	0.2018 mL	1.0089 mL	2.0177 mL
50 mM	0.0404 mL	0.2018 mL	0.4035 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

Gutser U T , Gleitz J . The alkaloid 6-benzoylheteratisine inhibits voltage-gated Na+ channels in rat brain synaptosomes.[J]. Neuropharmacology, 1998, 37(9):1139-1146.