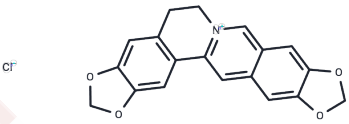
Data Sheet (Cat.No.T9862)

TargetMol

Pseudocoptisine chloride

Chemical Properties



CAS No. : 30044-78-1

Formula: C19H14ClNO4

Molecular Weight: 355.77

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	Pseudocoptisine chloride (Isocoptisine chloride) is isolated from Corydalis Tuber with anti-inflammatory and anti-amnestic properties. Pseudocoptisine chloride inhibits acetylcholinesterase (AChE) activity (IC50 = 12.8 μM).
Targets(IC50)	Cholinesterase (ChE)
In vitro	In RAW264.7 cells, Pseudocoptisine chloride (0, 60, 90 μM; 1 hour) inhibited LPS-induced NO production in a dose-dependent manner[1]. Pseudocoptisine chloride reduced levels of the pro-inflammatory mediators, such as, iNOS, COX-2, TNF-alpha, and IL-6 through the inhibition of NF-kappaB activation via the suppression of ERK and p38 phosphorylation. Pseudocoptisine chloride (30-90 μM; 1 hour) significantly reduced the LPS-induced TNF-α and IL-6 production and their mRNA expressions[2].
In vivo	Pseudocoptisine chloride (2.0 mg/kg, p.o.) showed anti-amnesic activities on the learning and memory impairments induced by scopolamine (1.0 mg/kg, i.p.) and significantly reverses cognitive impairments in mice by passive avoidance test[2].

Solubility Information

Solubility	DMSO: 1 mg/mL (2.81 mM),Sonication and heating to 60℃ are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8108 mL	14.054 mL	28.108 mL
5 mM	0.5622 mL	2.8108 mL	5.6216 mL
10 mM	0.2811 mL	1.4054 mL	2.8108 mL
50 mM	0.0562 mL	0.2811 mL	0.5622 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

Yun KJ, et al. Quaternary alkaloid, pseudocoptisine isolated from tubers of Corydalis turtschaninovi inhibits LPS-induced nitric oxide, PGE(2), and pro-inflammatory cytokines production via the down-regulation of NF-kappaB in RAW 264.7 murine macrophage cells. Int Immunopharmacol. 2009;9(11):1323-1331.
Hung TM, et al. Anti-amnestic activity of pseudocoptisine from Corydalis Tuber. Biol Pharm Bull. 2008;31(1):159-162.