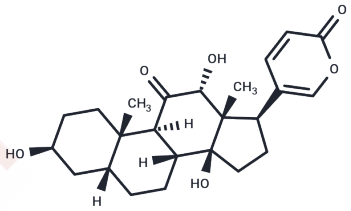
Data Sheet (Cat.No.TQ0065)

TargetMol

Pseudobufarenogin

Chemical Properties



CAS No. : 17008-69-4

Formula: C24H32O6

Molecular Weight: 416.51

Storage: 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	Pseudobufarenogin (ψ-Bufarenogin), a novel anti-tumor compound, suppresses liver cancer growth by inhibiting receptor tyrosine kinase-mediated signaling.
Targets(IC50)	Others
In vitro	ψ-Bufarenogin, a novel active compound that we isolated from the extract of toad skin, exhibited potent therapeutic effect in xenografted human hepatoma without notable side effects.?In vitro, ψ-Bufarenogin suppressed HCC cells proliferation through impeding cell cycle progression, and it facilitated cell apoptosis by downregulating Mcl-1 expression.?Moreover, ψ-Bufarenogin decreased the number of hepatoma stem cells through Sox2 depression and exhibited synergistic effect with conventional chemotherapeutics.?Mechanistic study revealed that ψ-Bufarenogin impaired the activation of MEK/ERK pathway, which is essential in the proliferation of hepatoma cells.?ψ-Bufarenogin notably suppressed PI3-K/Akt cascade, which was required in ψ-Bufarenogin-mediated reduction of Mcl-1 and Sox2.?ψ-Bufarenogin inhibited the auto-phosphorylation and activation of epithelial growth factor receptor (EGFR) and hepatocyte growth factor receptor (c-Met), thereafter suppressed their primary downstream cascades Raf/MEK/ERK and PI3-K/Akt signaling.?Taken together, ψ-Bufarenogin suppressed HCC growth via inhibiting, at least partially, receptor tyrosine kinases-regulated signaling, suggesting that ψ-Bufarenogin could be a novel lead compound for anti-HCC drug.

Solubility Information

Solubility	DMSO: 60 mg/mL (144.05 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4009 mL	12.0045 mL	24.009 mL
5 mM	0.4802 mL	2.4009 mL	4.8018 mL
10 mM	0.2401 mL	1.2005 mL	2.4009 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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

Ding J, et al. ψ-Bufarenogin, a novel anti-tumor compound, suppresses liver cancer growth by inhibiting receptor tyrosine kinase-mediated signaling. Oncotarget. 2015 May 10;6(13):11627-39.