

Bacoside A3

Chemical Properties

CAS No. : 157408-08-7

Formula: C47H76O18

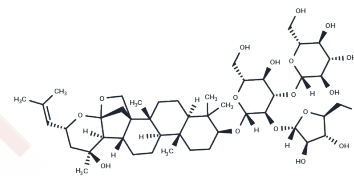
Molecular Weight: 929.10

Storage:

Keep away from direct sunlight, Keep away from moisture, Store under nitrogen

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	Bacoside A3 is one of the components of <i>Bacopa monnieri</i> (L.) Wettst. bacoside A with antioxidant potential. Bacoside A3 shows comparatively higher neuroprotective response analysed as higher cell viability and decreased intracellular ROS.
Targets(IC50)	Apoptosis,ATPase,NO Synthase,COX,P-gp,ROS
In vitro	The cytoprotective effects of individual bacoside A components were evaluated towards oxidative stressed neuronal cells. Bacoside A was screened for neuronal cell viability (MTT assay) and change in intracellular reactive oxygen species (ROS), anti-apoptotic properties and mitochondrial membrane potential (MMP) using fluorescence microscopy. Different bacoside A components showed decrease in N2a cell viability below 100 (%) after bacoside A concentration of 0.4 mg/ml. Further, cytoprotective effect of optimized dose of bacoside A was analysed for alleviating oxidative stressed, apoptosis and MMP in H ₂ O ₂ stressed neuronal cells. Results showed increase in MMP, and decrease in apoptotic induction, without much change in nuclear integrity in stressed neuronal cells. Results showed Bacoside A3 and bacoside II have comparatively higher cytoprotective ability whilst isomer of bacoside C, bacoside C and mixture showed comparatively less response[1]

Solubility Information

Solubility	DMSO: 60.00 mg/mL (64.58 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0763 mL	5.3816 mL	10.7631 mL
5 mM	0.2153 mL	1.0763 mL	2.1526 mL
10 mM	0.1076 mL	0.5382 mL	1.0763 mL
50 mM	0.0215 mL	0.1076 mL	0.2153 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

Bhardwaj P, Jain CK, Mathur A. Comparative evaluation of four triterpenoid glycoside saponins of bacoside A in alleviating sub-cellular oxidative stress of N2a neuroblastoma cells. *J Pharm Pharmacol*. 2018 Nov;70(11):1531-1540.

Vini C Sekhar, et al. Insights Into the Molecular Aspects of Neuroprotective Bacoside A and Bacopaside I. *Curr Neuropharmacol*. 2019;17(5):438-446.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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