

Batatasin III

Chemical Properties

CAS No. : 56684-87-8

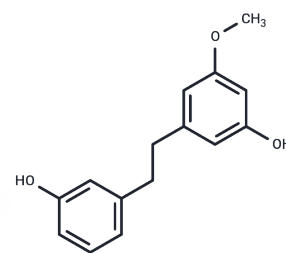
Formula: C₁₅H₁₆O₃

Molecular Weight: 244.29

Storage: Keep away from direct sunlight, Keep away from moisture

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	Batatasin III inhibits cancer migration and invasion by suppressing epithelial to mesenchymal transition and FAK-AKT signals and possesses anti-cancer activities. Batatasin III has a long-term inhibitory effect on whole-plant growth and shows germination
Targets(IC50)	FAK,Akt
In vivo	Batatasin III may impose a lethal effect on the aquatic fauna in small streams. The maximum concentration of Batatasin III found was 1.06 mg l ⁽⁻¹⁾ . The proportion of dead yolk sac alevins increased significantly (P < 0.001) with increasing concentrations of Batatasin III and time of exposure. After 24 hr, EC50 was 10 mg l ⁽⁻¹⁾ . It was 2 mg l ⁽⁻¹⁾ after 48 hr. The effect of phenol was negligible, indicating a specific phytotoxic effect of the bibenzyl structure of Batatasin III. The proportion of mobile D. magna became significantly smaller (P < 0.001) with increasing concentrations of Batatasin III, with decreasing pH, and with increasing exposure time. EC50 varied between 7 and 17 mg l ⁽⁻¹⁾ at pH 5.5 and 7.0, respectively. After 24 hr EC50 decreased and was 2.5 at pH 5.5 and 12 mg l ⁽⁻¹⁾ at pH 7.0. The levels of Batatasin III found in the field samples were below the lowest EC50 in acute toxicity tests[1]. Batatasin III significantly suppresses mesenchymal transition indicated by the decrease of N-cadherin and Vimentin and up-regulation of E-cadherin[1]. Batatasin III (25-100 μM; 48 h) exhibits anti-proliferative activity in H460 cells. Batatasin III at concentrations lower than 100 μM has no cytotoxic effects[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0935 mL	20.4675 mL	40.935 mL
5 mM	0.8187 mL	4.0935 mL	8.187 mL
10 mM	0.4093 mL	2.0467 mL	4.0935 mL
50 mM	0.0819 mL	0.4093 mL	0.8187 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

Potential toxic effect on aquatic fauna by the dwarf shrub *Empetrum hermaphroditum*. *J Chem Ecol.* 2004 Jan;30(1): 215-27.

Tatchakorn Pinkhien, et al. Batatasin III Inhibits Migration of Human Lung Cancer Cells by Suppressing Epithelial to Mesenchymal Transition and FAK-AKT Signals. *Anticancer Res.* 2017 Nov;37(11):6281-6289.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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