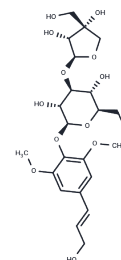


Cordifolioside A

Chemical Properties

CAS No. :	155179-20-7
Formula:	C ₂₂ H ₃₂ O ₁₃
Molecular Weight:	504.48
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	Cordifolioside A possesses immunomodulatory activity, it has a potential in vivo radioprotective effect as well as in vitro cytoprotective activity.
In vitro	<p><i>Tinospora cordifolia</i> mentioned as 'Rasayana' is extensively used in various herbal preparations for the treatment of different ailments for its general tonic, antiperiodic, antispasmodic, antiinflammatory, antiarthritic, antiallergic and antidiabetic properties. It is extensively used in Ayurveda due to its potential in improving the immune system and the body resistance against infections. The aim of the study was to isolate and characterise the immunomodulatory active compounds of <i>Tinospora cordifolia</i>.</p> <p>METHODS AND RESULTS:The immunomodulatory activity of different extracts, fractions and isolated compounds in relation to phagocytosis and reactive oxygen species production in human neutrophil cells have been investigated using the PMN phagocytic function studies, NBT, NO and chemiluminescence assay. The results obtained indicate that ethyl acetate, water fractions and hot water extract exhibited significant immunomodulatory activity with an increase in percentage phagocytosis.</p> <p>Chromatographic purification of these fraction led to the isolation of a mixture of two compounds 2, 3 isolated for the first time from natural source and five known compounds 1, 4-7 which were characterized as 11-hydroxymustakone (2), N-methyl-2-pyrrolidone (3), N-formylannonain (1), Cordifolioside A (4), magnoflorine (5), tinocordiside (6), syringin (7) by nuclear magnetic resonance (NMR) and mass spectrometry (MS) and comparing the spectral data with reported one. Cordifolioside A and syringin have been reported to possess immunomodulatory activity. Other five compounds showed significant enhancement in phagocytic activity and increase in nitric oxide and reactive oxygen species generation at concentration 0.1-2.5 µg/ml.</p> <p>CONCLUSIONS:Seven immunomodulatory active compounds belonging to different classes have been isolated and characterised indicating that the immunomodulatory activity of <i>Tinospora cordifolia</i> may be attributed to the synergistic effect of group of compounds.</p>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9822 mL	9.9112 mL	19.8224 mL
5 mM	0.3964 mL	1.9822 mL	3.9645 mL
10 mM	0.1982 mL	0.9911 mL	1.9822 mL
50 mM	0.0396 mL	0.1982 mL	0.3964 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

Immunomodulatory active compounds from *Tinospora cordifolia*. J Ethnopharmacol. 2012 Jun 14;141(3):918-26.

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