Data Sheet (Cat.No.TN6569)

cis-Moschamine

Chemical Properties

CAS No.:	193224-24-7
Formula:	C20H20N2O4
Molecular Weight:	N/A
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	cis-Moschamine exerts antitumour effects on HeLa, MCF7 and A431 cells.
In vitro	The antiproliferative effects of n-hexane, chloroform and aqueous methanol extracts prepared from the whole plant of Centaurea arenaria M.B. ex Willd. were investigated against cervix adenocarcinoma (HeLa), breast adenocarcinoma (MCF7) and skin epidermoid carcinoma (A431) cells, using the MTT assay. METHODS AND RESULTS: The chloroform extract displayed high tumour cell proliferation inhibitory activity (higher than 85% at 10 μg/mL concentration), and was therefore subjected to a bioassay-guided multistep separation procedure. Flavonoids (eupatilin, eupatorin, 3'-methyleupatorin, apigenin and isokaempferid), lignans (arctigenin, arctiin and matairesinol), the sesquiterpene cnicin, serotonin conjugates (moschamine and cis-Moschamine), β-amyrin and β-sitosterin-β-D-glycopyranoside, identified by means of UV, MS and NMR spectroscopy, were obtained for the first time from this species. CONCLUSIONS: The isolated compounds were also evaluated for their tumour cell growth inhibitory activities on HeLa, MCF7 and A431 cells, and different types of secondary metabolites were found to be responsible for the antitumour effects of the extracts; in addition to moderately active compounds (isokaempferid and moschamine), especially apigenin, eupatorin, arctigenin, arctiin, matairesinol and cnicin exert marked antitumour effects against these cell lines.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Bioactivity-guided isolation of antiproliferative compounds from Centaurea arenaria. Phytother Res. 2010 Nov;24(11):1664-9.

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