

Moschamine

Chemical Properties

CAS No.:	68573-23-9
Formula:	C ₂₀ H ₂₀ N ₂ O ₄
Molecular Weight:	352.39
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Moschamine is a very potent compound that is able to inhibit COX-I by 58% and COX-II by 54%, at the concentration of 0.1 µmol L ⁻¹ ; it may suppress cAMP formation via binding to 5-HT ₁ receptors in the cells. Moschamine exerts antitumour effects on HeLa, MCF7 and A431 cells.
Targets(IC ₅₀)	5-HT Receptor: None cAMP: None COX: None
In vitro	METHODS AND RESULTS: 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
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.838 mL	14.189 mL	28.378 mL
5 mM	0.568 mL	2.838 mL	5.676 mL
10 mM	0.284 mL	1.419 mL	2.838 mL
50 mM	0.057 mL	0.284 mL	0.568 mL

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 °C for 6 months; - 20 °C 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.

[Inhibitors](#) · [Natural Compounds](#) · [Compound Libraries](#)

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481