Data Sheet (Cat.No.TN4449)

TargetMol
A DRUG SCREENING EXPERT

Longistylin C

Chemical Properties

CAS No.:	64125-60-6
Formula:	C20H22O2
Molecular Weight:	294.4
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Longistylin A and longistylin C show some cytotoxic effects, with IC(50) values of 0.7-14.7 microM against the range of cancer cell lines. Longistylin A and longistylin C, and betulinic acid show a moderately high in vitro activity against the chloroquine-sensitive Plasmodium falciparum strain 3D7.
Targets(IC_{50})	Antifection: None
In vitro	A total of 30 healers from S W Nigeria were involved in the study. METHODS AND RESULTS: 45 species were recorded with their local names with parts used in the traditional therapeutic preparations. Cytotoxicity (IC(50) values less than 50 microg/mL) was observed in 5 species (Acanthospermum hispidum, Cajanus cajan, Morinda lucida, Nymphaea lotus and Pycnanthus angolensis). Acanthospermum hispidum and Cajanus cajan were the most active. The dichloromethane fraction of Cajanus cajan had IC(50) value 5-10 microg/mL, with the two constituent stilbenes, longistylin A and Longistylin C, being primarily responsible, with IC(50) values of 0.7-14.7 microM against the range of cancer cell lines.Most of the species tested had some cytotoxic effect on the cancer cell lines, which to some extent supports their traditional inclusion in herbal preparations for treatment of cancer. However, little selectivity for cancer cells was observed, which raises concerns over their safety and efficacy in traditional treatment. CONCLUSIONS: The longistylin A and Longistylin C appear to be responsible for much of the activity of Cajanus cajan extract.

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.397 mL	16.984 mL	33.967 mL
5 mM	0.679 mL	3.397 mL	6.793 mL
10 mM	0.340 mL	1.698 mL	3.397 mL
50 mM	0.068 mL	0.340 mL	0.679 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 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Ethnobotanical survey and cytotoxicity testing of plants of South-western Nigeria used to treat cancer, with isolation of cytotoxic constituents from Cajanus cajan Millsp. leaves. J Ethnopharmacol. 2010 Mar 24;128(2):501-12.
2. Antiplasmodial constituents of Cajanus cajan. Phytother Res. 2004 Feb;18(2):128-30.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481