

Norcaesalpinin E

Chemical Properties

CAS No.:	854038-96-3
Formula:	C ₂₁ H ₂₈ O ₆
Molecular Weight:	376.44
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Norcaesalpinin E shows antimalarial activity against the malaria parasite Plasmodium falciparum FCR-3/A2 clone in vitro, with an IC ₅₀ value of 0.090 microM.
Targets(IC ₅₀)	Antifection: None
In vitro	Malaria is one of the most life-threatening infectious diseases worldwide and claims millions of people's lives each year. The appearance of drug-resistance Plasmodium falciparum has made the treatment of malaria increasingly problematic, and thus, it is a dire need to search the new alternatives of current drugs. METHODS AND RESULTS: In the present study, 44 cassane- and norcassane-type diterpenes isolated from Caesalpinia crista of Myanmar and Indonesia were evaluated for their antimalarial activity against the malaria parasite Plasmodium falciparum FCR-3/A2 clone in vitro. Most of the tested diterpenes displayed antimalarial activity, and Norcaesalpinin E (28) showed the most potent activity with an IC ₅₀ value of 0.090 microM, more potent than the clinically used drug chloroquine (IC ₅₀ , 0.29 microM). Based on the observed results, a structure-activity relationship has been established.

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.656 mL	13.282 mL	26.565 mL
5 mM	0.531 mL	2.656 mL	5.313 mL
10 mM	0.266 mL	1.328 mL	2.656 mL
50 mM	0.053 mL	0.266 mL	0.531 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. Antimalarial activity of cassane- and norcassane-type diterpenes from Caesalpinia crista and their structure-activity relationship. Biol Pharm Bull. 2006 May;29(5):1050-2.

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