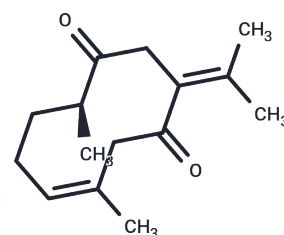


Dehydrocurdione

Chemical Properties

CAS No. :	38230-32-9
Formula:	C ₁₅ H ₂₂ O ₂
Molecular Weight:	234.34
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	Dehydrocurdione is a sesquiterpene derived from zedoary with potent anti-inflammatory and antioxidant properties. It functions as a specialized inducer of Heme Oxygenase (HO)-1 by interacting with Keap1 via a Michael addition reaction involving its α , β -unsaturated carbonyl group. This leads to the nuclear translocation of Nrf2 and activation of the HO-1 E2 enhancer, effectively suppressing LPS-induced NO release.
Targets(IC50)	Antioxidant, Nrf2, Immunology/Inflammation related
In vitro	In vitro, Dehydrocurdione induces HO-1 expression in RAW 264.7 cells. Treatment with 100 μ M Dehydrocurdione significantly increases HO-1 mRNA levels within 3 hours, with protein levels peaking at 6 hours. Western Blot analysis confirms promoted nuclear translocation of Nrf2 [1].
In vivo	In vivo, Dehydrocurdione (120 mg/kg, p.o.) significantly reduces chronic adjuvant arthritis in Wistar rats. In Sprague-Dawley rats, a dose of 200 mg/kg (p.o.) inhibits carrageenan-induced paw edema [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2673 mL	21.3365 mL	42.673 mL
5 mM	0.8535 mL	4.2673 mL	8.5346 mL
10 mM	0.4267 mL	2.1337 mL	4.2673 mL
50 mM	0.0853 mL	0.4267 mL	0.8535 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

Ohnishi M, et al. Curcuma sp.-derived dehydrocurdione induces heme oxygenase-1 through a Michael reaction between its α , β -unsaturated carbonyl and Keap1. *Phytother Res.* 2018;32(5):892-897.

Yoshioka T, et al. Antiinflammatory potency of dehydrocurdione, a zedoary-derived sesquiterpene. *Inflamm Res.* 1998;47(12):476-481.

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