

erythro-Guaiacylglycerol beta-coniferyl ether

Chemical Properties

CAS No.:	890317-92-7
Formula:	C ₂₀ H ₂₄ O ₇
Molecular Weight:	376.4
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	erythro-Guaiacylglycerol beta-coniferyl ether displays significant inhibitory effects on NO production.
Targets(IC ₅₀)	NO: None
In vitro	<p>METHODS AND RESULTS: One new and sixteen known lignans were isolated and characterized. The absolute configuration of the new lignan, (7R,8S)-9-acetyl-dehydrodiconiferyl alcohol (1), was elucidated by a combination of 1D/2D NMR techniques and the Electronic Circular Dichroism (ECD) spectroscopy based on the empirical helicity rules. CONCLUSIONS: The anti-neuroinflammatory bioassay showed that compounds 1, (7R,8S)-dehydrodiconiferyl alcohol (2), erythro-guaiacylglycerol-β-coniferyl ether (5), and erythro-Guaiacylglycerol beta-coniferyl ether (6) displayed significant inhibitory effects on NO production. Among them, neolignans 1 and 2 exhibited more potent activities than the positive control (N(G)-monomethyl-L-arginine, L-NMMA), with an IC₅₀ value of 9.3 and 3.9 μM, respectively. Moreover, both 1 and 2 were also found to concentration-dependently suppress the TNF-α release in LPS-stimulated BV-2 cells.</p>

Solubility Information

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

	1mg	5mg	10mg
1 mM	2.657 mL	13.284 mL	26.567 mL
5 mM	0.531 mL	2.657 mL	5.313 mL
10 mM	0.266 mL	1.328 mL	2.657 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. Lignans from the stems of *Clematis armandii* ("Chuan-Mu-Tong") and their anti-neuroinflammatory activities. *J Ethnopharmacol.* 2014 May 14;153(3):737-43.

Inhibitors · Natural Compounds · Compound Libraries

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