Data Sheet (Cat.No.TMA1777)

TargetMol
A DRUG SCREENING EXPERT

Hydrangenol 8-O-glucoside

Chemical Properties

CAS No.:	67600-94-6
Formula:	C21H22O9
Molecular Weight:	418.4
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Hydrangenol 8-O-glucoside may have anti-inflammary activity.
Targets(IC_{50})	IL Receptor: None NF-κB: None TNF-α: None
In vitro	Scorzonera species are used in different folk medicines to combat many diseases, including the illnesses connected with inflammation. Previous experiments showed anti-inflammatory activity of Scorzonera extracts in vivo. S. latifolia, S. cana var. jacquiniana, S. tomentosa, S. mollis ssp. szowitsii, S. eriophora, S. incisa, S. cinerea, and S. parviflora extracts were, therefore, evaluated for their inhibitory activities of TNF-α and IL-1β production, and NF-ÎºB nuclear translocation in THP-1 macrophages. METHODS AND RESULTS: The HPLC analysis was carried out to elucidate and to compare the composition of these extracts. Major compounds of the tested extracts have been isolated using different chromatographic techniques and further tested for their inhibitory activities on TNF-α and IL-1β production. Several extracts showed promising anti-inflammatory activity in these in vitro tests. Results of HPLC analysis revealed chlorogenic acid as a compound present in all tested extracts. Hyperoside, quercetin-3-O-β-d-glucoside and rutin were also present in varying amount in some Scorzonera species analyzed. Furthermore, eight phenolics which were identified as quercetin-3-O-β-d-glucoside (1), hyperoside (2), Hydrangenol 8-O-glucoside (3), swertisin (4), 7-methylisoorientin (5), 4,5-O-dicaffeoyl-quinic acid (6), 3,5-di-O-caffeoyl-quinic acid (7), and chlorogenic acid (8) have been isolated as major phenolic compounds of the tested extracts and, together with eight terpenoids (9-16) previously obtained from different Scorzonera species, have been tested for the inhibition of TNF-α production, unfortunately with no activity comparable with standard.

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.390 mL	11.950 mL	23.901 mL
5 mM	0.478 mL	2.390 mL	4.780 mL
10 mM	0.239 mL	1.195 mL	2.390 mL
50 mM	0.048 mL	0.239 mL	0.478 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. Turkish Scorzonera Species Extracts Attenuate Cytokine Secretion via Inhibition of NF-ÎºB Activation, Showing Anti-Inflammatory Effect in Vitro. Molecules. 2015 Dec 30;21(1):E43.

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