

Scutebata B

Chemical Properties

CAS No.:	1207181-58-5
Formula:	C ₃₅ H ₃₉ NO ₁₀
Molecular Weight:	633.7
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Scutebata B inhibited NO production efficiently with IC ₅₀ values of lower than 50 µM.
Targets(IC ₅₀)	NO: None
In vitro	METHODS AND RESULTS: The arial parts of <i>Scutellaria barbata</i> D. Don (Lamiaceae) efficiently inhibited NO production in BV2 microglial cells, and the active constituents were further isolated based on activity-guided isolation using silica-gel column chromatography, RP-C18 MPLC and prep-HPLC. As the results, 2 flavonoids including 6-methoxynaringenin (1) and 6-O-methylscutellarein (5), and 6 neo-clerodane diterpenes such as scutebarbatine W (2), Scutebata B (3), scutebarbatine B (4), scutebarbatine A (6), 6-O-nicotinolyiscutebarbatine G (7) and scutebarbatine X (8) were isolated. The structures of these compounds were elucidated based on NMR and MS data, and the comparison of literature values. All the compounds except compound 7 inhibited NO production efficiently with IC ₅₀ values of lower than 50 µM. Particularly, compound 1 and 8 were the most efficient with IC ₅₀ values of 25.8 and 27.4 µM, respectively. CONCLUSIONS: This is the first report suggesting the potential of <i>S. barbata</i> on the reduction of neuroinflammation.

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	1.578 mL	7.890 mL	15.780 mL
5 mM	0.316 mL	1.578 mL	3.156 mL
10 mM	0.158 mL	0.789 mL	1.578 mL
50 mM	0.032 mL	0.158 mL	0.316 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. Constituents from *Scutellaria barbata* Inhibiting Nitric Oxide Production in LPS-Stimulated Microglial Cells. *Chemistry & Biodiversity*, 2017, 14(11).

Inhibitors · Natural Compounds · Compound Libraries

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