

1,5-Dihydroxyxanthone

Chemical Properties

CAS No.:	14686-65-8
Formula:	C ₁₃ H ₈ O ₄
Molecular Weight:	228.2
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	1,5-Dihydroxyxanthone exhibits the epidermal growth factor receptor (EGFR) -tyrosine kinase inhibitory activity, with the IC ₅₀ value of 90.34 nM. It may have anticholinesterase activity on acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) enzymes.
Targets(IC ₅₀)	AChR: None BChE: None EGFR: None
In vitro	METHODS AND RESULTS: Three xanthenes, polyanxanthone A (1), B (2) and C (3) have been isolated from the methanol extract of the wood trunk of <i>Garcinia polyantha</i> , along with five known xanthenes: 1,3,5-trihydroxyxanthone (4); 1,5-Dihydroxyxanthone (5); 1,3,6,7-tetrahydroxyxanthone (6); 1,6-dihydroxy-5-methoxyxanthone (7) and 1,3,5,6-tetrahydroxyxanthone (8). Their structures were determined by means of 1D- and 2D-NMR techniques. CONCLUSIONS: Some of the above compounds were screened for their anticholinesterase activity on acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) enzymes.

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	4.382 mL	21.911 mL	43.821 mL
5 mM	0.876 mL	4.382 mL	8.764 mL
10 mM	0.438 mL	2.191 mL	4.382 mL
50 mM	0.088 mL	0.438 mL	0.876 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. Polyanxanthone A, B and C, three xanthenes from the wood trunk of *Garcinia polyantha* Oliv. *Phytochemistry*. 2008 Feb;69(4):1013-7.
2. Antibacterial and EGFR-tyrosine kinase inhibitory activities of polyhydroxylated xanthenes from *Garcinia succifolia*. *Molecules*. 2014 Nov 28;19(12):19923-34.

Inhibitors · Natural Compounds · Compound Libraries

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