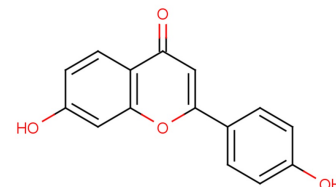


4',7-Dihydroxyflavone

Chemical Properties

CAS No.:	2196-14-7
Formula:	C15H10O4
Molecular Weight:	254.1
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	4',7-Dihydroxyflavone can induce transcription of nodulation (nod) genes in <i>Rhizobium meliloti</i> . It has inhibitory activities against COX-2.
Targets(IC ₅₀)	COX: None NOD1: None
In vitro	Root exudate from 3-day-old alfalfa seedlings was purified and then assayed for biological activity with a nodABC-lacZ fusion in <i>R. meliloti</i> . Identities of major nod inducers were established by spectroscopic analyses (ultraviolet/visible, proton nuclear magnetic resonance, and mass spectroscopy) and comparison with authentic standards. Major nod inducers, which were identified as 4',7-Dihydroxyflavone, 4'-7-dihydroxyflavanone, and 4,4'-dihydroxy-2'-methoxychalcone, were released from seedling roots at 54, 22, and 20 picomole.plant(-1).day(-1), respectively. Luteolin was not found in these root exudates.

Solubility Information

Solubility	DMSO: 250 mg/mL (983.32 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.935 mL	19.677 mL	39.355 mL
5 mM	0.787 mL	3.935 mL	7.871 mL
10 mM	0.394 mL	1.968 mL	3.935 mL
50 mM	0.079 mL	0.394 mL	0.787 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. A Chalcone and Two Related Flavonoids Released from Alfalfa Roots Induce nod Genes of *Rhizobium meliloti*. *Plant Physiol.*, 1989, 91(3):842-7.

Inhibitors · Natural Compounds · Compound Libraries

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