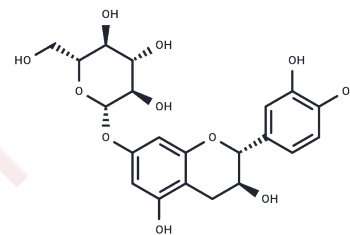


Catechin 7-O-β-D-glucopyranoside

Chemical Properties

CAS No. :	65597-47-9
Formula:	C ₂₁ H ₂₄ O ₁₁
Molecular Weight:	452.41
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Catechin 7-O-β-D-glucopyranoside is a major bioactive constituent associated with antioxidant and anti-inflammatory benefits of PHCR seed extracts and has been recognized as a promising research agent for intestinal inflammatory disorders. Catechin 7-O-β-D-glucopyranoside demonstrates strong biological effects supporting future pharmaceutical development of CGP-containing formulations against gastrointestinal inflammatory diseases.
Targets(IC50)	Antioxidant, Immunology/Inflammation related
In vitro	Catechin 7-O-β-D-glucopyranoside (10 μg/mL, 24 hours) can protect against Streptozotocin-induced cellular damage, with its mechanism involving antioxidant effects and alleviation of mitochondrial dysfunction to exert protective effects [3].
In vivo	Catechin 7-O-β-D-glucopyranoside (10 mg/kg, intraperitoneal injection, single dose) exhibited slight protective effects against LPS/D-GalN-induced lethal effects [1]. Catechin 7-O-β-D-glucopyranoside (10 mg/kg, oral administration, once daily for 7 consecutive days) effectively prevented intestinal inflammatory damage in a TNBS-induced rat colitis model [2].

Solubility Information

Solubility	DMSO: 100 mg/mL (221.04 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2104 mL	11.0519 mL	22.1038 mL
5 mM	0.4421 mL	2.2104 mL	4.4208 mL
10 mM	0.221 mL	1.1052 mL	2.2104 mL
50 mM	0.0442 mL	0.221 mL	0.4421 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Zheng MS, et al. Protective constituents against sepsis in mice from the root barks of *Ulmus davidiana* var. *japonica*. *Arch Pharm Res*. 2011 Sep;34(9):1443-50.
- Kook SH, et al. Catechin-7-O- β -D-glucopyranoside isolated from the seed of *Phaseolus calcaratus* Roxburgh ameliorates experimental colitis in rats. *Int Immunopharmacol*. 2015 Dec;29(2):521-527.
- Kim KC, et al. Cytoprotective effects of catechin 7-O- β -D glucopyranoside against mitochondrial dysfunction damaged by streptozotocin in RINm5F cells. *Cell Biochem Funct*. 2010 Dec 2;28(8):651-60.

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