

1,2,3,6-Tetragalloylglucose

Chemical Properties

CAS No. : 79886-50-3

Formula: C₃₄H₂₈O₂₂

Molecular Weight: 788.57

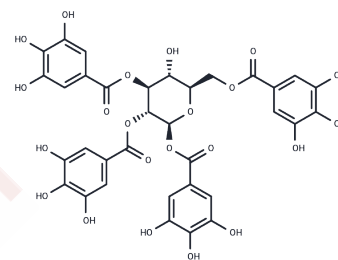
Keep away from direct sunlight, Store at low temperature, The compound is unstable in solution.

Storage:

Please use soon, Keep away from moisture

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	1,2,3,6-Tetragalloylglucose (TeGG) has antioxidative activity, it also shows the most potent anticomplement activity (IC ₅₀ = 34 microM). 1,2,3,6-Tetragalloylglucose is also a potent inhibitor of UDP glucuronosyltransferase 1 A1 (UGT1A1, K _i = 1.68 μM).
Targets(IC ₅₀)	LDL, UGT
In vitro	Two phenolics, 1,2,6-trigalloylglucose (1) and 1,2,3,6-Tetragalloylglucose (2), isolated from the stem-bark of Juglans mandshurica were evaluated for their antioxidative activities. The results showed that compounds 1 and 1,2,3,6-Tetragalloylglucose exhibited strong scavenging activities against 1,1'-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-azino-bis-(3-ethylbenzothiazoline-6-sulphonic) acid (ABTS(*+)), and superoxide radicals (O ₂ (*-)), and also had a significant inhibitory effect on lipid peroxidation and low-density lipoprotein (LDL) oxidation[1]

Solubility Information

Solubility	DMSO: 100 mg/mL (126.81 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (4.18 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2681 mL	6.3406 mL	12.6812 mL
5 mM	0.2536 mL	1.2681 mL	2.5362 mL
10 mM	0.1268 mL	0.6341 mL	1.2681 mL
50 mM	0.0254 mL	0.1268 mL	0.2536 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

Ngoc TM, et al. Antioxidative activities of galloyl glucopyranosides from the stem-bark of *Juglans mandshurica*. *Biosci Biotechnol Biochem*. 2008 Aug;72(8):2158-63.

Park JB, et al. Identification and characterization of in vitro inhibitors against UDP-glucuronosyltransferase 1A1 in *uva-ursi* extracts and evaluation of in vivo *uva-ursi*-drug interactions. *Food Chem Toxicol*. 2018 Oct;120:651-661.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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