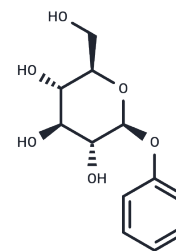


Phenyl- β -D-glucopyranoside

Chemical Properties

CAS No. :	1464-44-4
Formula:	C ₁₂ H ₁₆ O ₆
Molecular Weight:	256.25
Storage:	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	Phenyl- β -D-glucopyranoside (PHENYL-B-D-GLUCOPYRANOSIDE) is a component of Phellodendron amurense with anti-cancer and anti-inflammatory activities.
Targets(IC50)	Others,NF- κ B,COX
In vitro	Phenyl- β -D-Glucopyranoside Exhibits Anti-inflammatory Activity in Lipopolysaccharide-Activated RAW 264.7 Cells. Phenyl- β -D-glucopyranoside not only inhibited nitric oxide (NO) production but also significantly inhibited the expression of inducible NO synthase (iNOS) and cyclooxygenase-2 (COX-2) without inducing cytotoxicity. Phenyl- β -D-glucopyranoside also attenuated proinflammatory cytokines, including tumor necrosis factor- α (TNF- α), interleukin-1 β (IL-1 β) and other inflammation-related genes, such as IL-6 in a concentration-dependent manner. Furthermore, phenyl- β -D-glucopyranoside abolished increased adhesion, ninjurin 1 (Ninj1) expression, and matrix metalloproteinase (MMP) activity induced by endotoxin treatment. Finally, phenyl- β -D-glucopyranoside inhibited the nuclear translocation of nuclear factor- κ B (NF- κ B), which is one of the most important transcription factors involved in the inflammatory process.

Solubility Information

Solubility	H ₂ O: soluble, DMSO: 60 mg/mL (234.15 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: 2 mg/mL (7.8 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	3.9024 mL	19.5122 mL	39.0244 mL
5 mM	0.7805 mL	3.9024 mL	7.8049 mL
10 mM	0.3902 mL	1.9512 mL	3.9024 mL
50 mM	0.078 mL	0.3902 mL	0.7805 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

Hwang SJ, Lee HJ. Phenyl- β -D-Glucopyranoside Exhibits Anti-inflammatory Activity in Lipopolysaccharide-Activated RAW 264.7 Cells. *Inflammation*. 2015;38(3):1071-9.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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