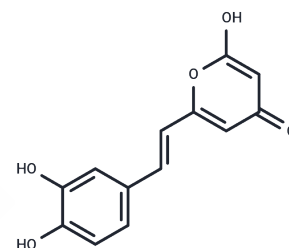


Hispidin

Chemical Properties

CAS No. :	555-55-5
Formula:	C ₁₃ H ₁₀ O ₅
Molecular Weight:	246.22
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	Hispidin is a polyphenol originally, including antioxidant, anti-inflammatory, and cytoprotective properties
Targets(IC50)	ERK,Ferroptosis,Akt,Nrf2,Endogenous Metabolite,STAT,GSK-3,JAK,JNK,p38 MAPK,PKC,ROS
In vitro	Hispidin from <i>P. linteus</i> exhibited quenching effects against DPPH radicals, superoxide radicals, and hydrogen peroxide in a dose-dependent manner. Intracellular reactive oxygen species scavenging activity of hispidin was approximately 55% at a concentration of 30 μ M. In addition, hispidin was shown to inhibit hydrogen peroxide-induced apoptosis and increased insulin secretion in hydrogen peroxide-treated cells. These combined results indicate that hispidin may act as an antidiabetic and that this property occurs through preventing β -cells from the toxic action of reactive oxygen species in diabetes[1].Hispidin inhibits protein kinase C β (PKC β ; IC ₅₀ = 2 μ M) with no activity against alkaline phosphatase[2]

Solubility Information

Solubility	DMSO: 22.5 mg/mL (91.38 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: 1 mg/mL (4.06 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	4.0614 mL	20.307 mL	40.6141 mL
5 mM	0.8123 mL	4.0614 mL	8.1228 mL
10 mM	0.4061 mL	2.0307 mL	4.0614 mL
50 mM	0.0812 mL	0.4061 mL	0.8123 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

Jang J S , Lee J S , Lee J H , et al. Hispidin produced from *Phellinus linteus* protects pancreatic β -cells from damage by hydrogen peroxide[J]. Archives of Pharmacal Research, 2010, 33(6):p.853-861.

Gonindard C , Bergonzi C , Denier C , et al. Synthetic hispidin, a PKC inhibitor, is more cytotoxic toward cancer cells than normal cells in vitro[J]. Cell Biology and Toxicology, 1997, 13(3):141-153.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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