

(+)-Columbianetin

Chemical Properties

CAS No. : 3804-70-4

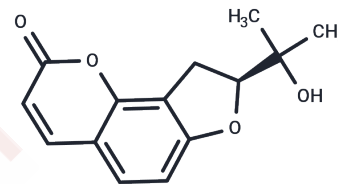
Formula: C₁₄H₁₄O₄

Molecular Weight: 246.26

Keep away from direct sunlight

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	(+)-Columbianetin ((S)-Columbianetin) is a new phytoalexin associated with celery (<i>Apium graveolens</i>) resistance to pathogens during storage, it also has antifungal activity. (+)-Columbianetin has anti-inflammatory effects, it promotes histamine release, and inhibits the histamine release by substance P, suggests that it may be helpful in regulating mast cell-mediated allergic inflammatory responses. (+)-Columbianetin can be effectively used to protect keratinocytes from UVB induced damage.
Targets(IC50)	Antifungal

Solubility Information

Solubility	DMSO: 9 mg/mL (36.55 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	4.0607 mL	20.3037 mL	40.6075 mL
5 mM	0.8121 mL	4.0607 mL	8.1215 mL
10 mM	0.4061 mL	2.0304 mL	4.0607 mL
50 mM	0.0812 mL	0.4061 mL	0.8121 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

Ahn B N , Kim J A , Kong C S , et al. Protective effect of (2'S)-columbianetin from *Corydalis heterocarpa* on UVB-induced keratinocyte damage[J]. *Journal of Photochemistry & Photobiology B Biology*, 2012, 109(none):20-27.

Uzi, Afek, and, et al. Columbianetin, a phytoalexin associated with celery resistance to pathogens during storage [J]. *Phytochemistry*, 1995.

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