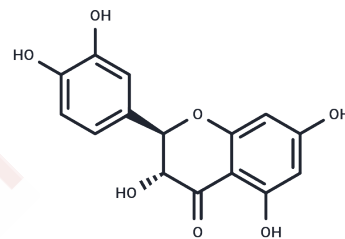


Taxifolin

Chemical Properties

CAS No. :	480-18-2
Formula:	C ₁₅ H ₁₂ O ₇
Molecular Weight:	304.25
Appearance:	no data available
Storage:	keep away from direct sunlight
	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Taxifolin (Dihydroquercetin) is a flavonoid in many plants such as <i>Taxus chinensis</i> , Siberian larch, <i>Cedrus deodara</i> and so on.
Targets(IC50)	Adrenergic Receptor, Autophagy, TNF, Tyrosinase, VEGFR
In vivo	Taxifolin is easily metabolized, and its metabolites are prevalent in vivo, although limited data exists on its in vivo metabolism[5]. Metabolites with the same fragment pattern may share the same pharmacophore, exerting the same pharmacological effects as taxifolin through an additive effect on the same drug targets. Thus, taxifolin is bioactive in both its parent form and through its metabolites.

Solubility Information

Solubility	DMSO: 65 mg/mL (213.64 mM), Sonication is recommended. Ethanol: 56 mg/mL (184.06 mM), Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2868 mL	16.4339 mL	32.8677 mL
5 mM	0.6574 mL	3.2868 mL	6.5735 mL
10 mM	0.3287 mL	1.6434 mL	3.2868 mL
50 mM	0.0657 mL	0.3287 mL	0.6574 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.

Reference

- Makena PS, et al. Environ Mol Mutagen, 2009, 50(6), 451-459.
- Abderrezag N, Montenegro Z J S, Louaer O, et al. One-step sustainable extraction of Silymarin compounds of wild Algerian milk thistle (*Silybum marianum*) seeds using Gas Expanded Liquids. Journal of Chromatography A. 2022: 463147
- Shim K S, Hwang Y H, Jang S A, et al. Ethanol Extract of Amomum tsao-ko Ameliorates Ovariectomy-Induced Trabecular Loss and Fat Accumulation. Molecules. 2021 Feb 3;26(4):784. doi: 10.3390/molecules26040784.
- Lee SB, et al. Biol Pharm Bull, 2007, 30(6), 1074-1079.
- Luo H, et al. Nutr Cancer, 2008, 60(6), 800-809.
- Shan H, Zhang X, Mi Y, et al. Eriodictyol Suppresses Gastric Cancer Cells via Inhibition of PI3K/AKT Pathway. Pharmaceuticals. 2022, 15(12): 1477.
- Tang X, Liu L, Li Y, et al. Chemical profiling and investigation of molecular mechanisms underlying anti-hepatocellular carcinoma activity of extracts from *Polygonum perfoliatum* L. Biomedicine & Pharmacotherapy. 2023, 166: 115315.
- Sharad Verma, et al. Journal of Applied Pharmaceutical Science. 2012, 2 (1): 41-46.
- Yang P, et al. Detection of 191 Taxifolin Metabolites and Their Distribution in Rats Using HPLC-ESI-IT-TOF-MS(n). Molecules. 2016 Sep 13;21(9). pii: E1209.
- Shan H, Zhang X, Mi Y, et al. Eriodictyol Suppresses Gastric Cancer Cells via Inhibition of PI3K/AKT Pathway. Pharmaceuticals. 2022, 15(12): 1477.
- Yang R, Li X, Yang X, et al. Dihydroquercetin alleviates dopamine neuron loss via regulating TREM2 activation. International Journal of Biological Macromolecules. 2024: 132179.
- Angelis A, et al. Bio-Guided Isolation of Methanol-Soluble Metabolites of Common Spruce (*Picea abies*) Bark by-Products and Investigation of Their Dermo-Cosmetic Properties. Molecules. 2016 Nov 21;21(11). pii: E1586.
- Shim K S, Hwang Y H, Jang S A, et al. Ethanol Extract of Amomum tsao-ko Ameliorates Ovariectomy-Induced Trabecular Loss and Fat Accumulation[J]. Molecules. 2021, 26(4): 784.

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