

Product Information

(±)-Taxifolin hydrate

Catalog Number **T4512**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

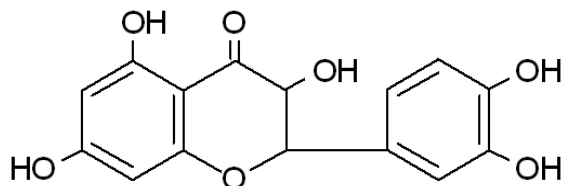
CAS RN 24198-97-8 (anhydrous)

Synonyms: 3,3',4',5,7-Pentahydroxyflavanone hydrate; Dihydroquercetin hydrate

Product Description

Molecular Formula: $\text{C}_{15}\text{H}_{12}\text{O}_7 \cdot x\text{H}_2\text{O}$

Molecular Weight: 304.25 (anhydrous)



Taxifolin is a flavonoid commonly found in plants. It can also be synthetically produced from quercetin. It is a highly potent antioxidant. It has been shown to suppress the cytotoxicity of superoxide ions and hydrogen peroxide in cultured mammalian cell lines.¹ The metal chelating properties of flavonoids indicate that they may play a role in metal-overload diseases and in all oxidative stress conditions involving a transition metal ion.

Flavonoids are divided into many categories, including flavonols (catechins), flavones (apigenin, luteolin, kaempferol, quercetin, myricetin, and rutin), proanthocyanidins, anthocyanidins, flavanones (taxifolin, naringenin, and naringin), and isoflavonoids (daidzein and genistein).² Flavonoids have many functions in plants. They act as cell wall support materials³ and as colorful attractants for birds and insects helping seed dispersal and pollination.⁴

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

This product is soluble in DMSO (20 mg/mL) and ethanol (20 mg/mL).

Storage/Stability

Store the product at $-20\text{ }^{\circ}\text{C}$.

References

1. Nakayama, T., Suppression of hydroperoxide-induced cytotoxicity by polyphenols. *Cancer Res.*, **54**(7 Suppl), 1991s-1993s (1994).
2. Havsteen, B., Flavonoids, a class of natural products of high pharmacological potency. *Biochem. Pharmacol.*, **32**(7), 1141-1148 (1983).
3. Wallace, G., and Fry, S.C., Phenolic components of the plant cell wall. *Int. Rev. Cytol.*, **151**, 229-267 (1994).
4. *The Flavonoids: Advances in Research Since 1986*. Harborne, J.B., Chapman & Hall (London, UK: 1994).

DXP,CMH,RXR,MAM 03/08-1

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