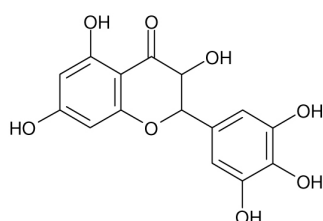


Myricetin

3,5,7-trihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one

Protein Kinase Inhibitor

Cat. No.	Amount
INH-004	5 mg



For *in vitro* use only
 Quality guaranteed for 12 months
 Store at -20°C

Avoid freeze / thaw cycles

Synonyms

3,3',4',5,5',7-Hexahydroxyflavone, Cannabiscetin.

Form

Lyophilized.

Solubility

10 mg/ml soluble in DMSO, 1 mg/ml soluble in Ethanol.
 Insoluble in Acetic Acid.

Molecular Formula

C₁₅H₁₀O₈.

Molecular Weight

318.24 g/mol.

Purity

≥95%

Description

Myricetin is a flavonoid that differs from quercetin only by the addition of a hydroxyl at the 5'-OH of the phenyl moiety. It shows cytotoxic activity against several human leukemic cell lines *in vitro*.

It strongly inhibits yeast α-glucosidase, glyoxalase I *in vitro*, cow's milk xanthine oxidase, and PI3-Kinase (IC50 = 1.8 μM).

Myricetin both modulates Na⁺/K⁺-ATPase-induced vasodilatation acting as a functional inhibitor of Na⁺/K⁺-ATPase activity and activates protein kinases, including PKC, to induce contraction. These effects appear to be related to the activation of PGH₂-TXA₂ receptors on vascular smooth muscle by the TXA₂ released from endothelium.

Selected References:

- Walker *et al.* (2000) Structural Determinants of Phosphoinositide 3-Kinase Inhibition by Wortmannin, LY294002, Quercetin, Myricetin, and Staurosporine. *Mol. Cell.* **6**:909.
 Jimenez *et al.* (2002) Involvement of protein kinase C and Na⁺/K⁺-ATPase in the contractile response induced by myricetin in rat isolated aorta. *Planta Med.* **68**:133.
 Dimas *et al.* (2000) Biological activity of myricetin and its derivatives against human leukemic cell lines *in vitro*. *Pharmacol Res.* **42**:475.
 Ong *et al.* (1997) Biological effects of myricetin. *Gen. Pharmacol.* **29**:121.