

flavanoid 3',5'-hydroxylase

Cat. No. EXWM-0896

Lot. No. (See product label)

Introduction

Description

A heme-thiolate protein (P-450). The 3',5'-dihydroxyflavanone is formed via the 3'-hydroxyflavanone. In *Petunia hybrida* the enzyme acts on naringenin, eriodictyol, dihydroquercetin (taxifolin) and dihydrokaempferol (aromadendrin). The enzyme catalyses the hydroxylation of 5,7,4'-trihydroxyflavanone (naringenin) at either the 3' position to form eriodictyol or at both the 3' and 5' positions to form 5,7,3',4',5'-pentahydroxyflavanone (dihydrotricetin). The enzyme also catalyses the hydroxylation of 3,5,7,3',4'-pentahydroxyflavanone (taxifolin) at the 5' position, forming ampelopsin. NADH is not a good substitute for NADPH.

Synonyms

flavonoid 3',5'-hydroxylase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.88

CAS No.

94047-23-1

Reaction

a flavanone + 2 NADPH + 2 H⁺ + 2 O₂ = a 3',5'-dihydroxyflavanone + 2 NADP⁺ + 2 H₂O (overall reaction); (1a) a flavanone + NADPH + H⁺ + O₂ = a 3'-hydroxyflavanone + NADP⁺ + H₂O; (1b) a 3'-hydroxyflavanone + NADPH + H⁺ + O₂ = a 3',5'-dihydroxyflavanone + NADP⁺ + H₂O

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.