

11-oxo-β-amyrin 30-oxidase

Cat. No. EXWM-0771

Lot. No. (See product label)

Introduction

Description

A heme-thiolate protein (cytochrome P-450). The enzyme is involved in the biosynthesis of the triterpenoid saponin glycyrrhizin in the plant Glycyrrhiza uralensis (licorice). The enzyme from the plant Medicago truncatula can also hydroxylate β-amyrin.

Synonyms

CYP72A; CYP72A154

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.173

Reaction

11-oxo-β-amyrin + 3 O₂ + 3 NADPH + 3 H⁺ = glycyrrhetinate + 3 NADP⁺ + 4 H₂O (overall reaction); (1a) 11-oxo-β-amyrin + O₂ + NADPH + H⁺ = 30-hydroxy-11-oxo-β-amyrin + NADP⁺ + H₂O; (1b) 30-hydroxy-11-oxo-β-amyrin + O₂ + NADPH + H⁺ = glycyrrhetaldehyde + NADP⁺ + 2 H₂O; (1c) glycyrrhetaldehyde + O₂ + NADPH + H⁺ = glycyrrhetinate + 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.