

## premnaspirodiene oxygenase

Cat. No. EXWM-0722

Lot. No. (See product label)

### Introduction

#### Description

A heme-thiolate protein (P-450). The enzyme from the plant *Hyoscyamus muticus* also hydroxylates valencene at C-2 to give the  $\alpha$ -hydroxy compound, nootkatol, and this is converted into nootkatone. 5-Epiaristolochene and epierepholone are hydroxylated at C-2 to give a 2 $\beta$ -hydroxy derivative which is not further oxidized.

#### Synonyms

HPO; *Hyoscyamus muticus* premnaspirodiene oxygenase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.13.121

#### Reaction

(-)-vetispiradiene + 2 NADPH + 2 H<sup>+</sup> + 2 O<sub>2</sub> = solavetivone + 2 NADP<sup>+</sup> + 3 H<sub>2</sub>O (overall reaction); (1a) (-)-vetispiradiene + NADPH + H<sup>+</sup> + O<sub>2</sub> = solavetivol + NADP<sup>+</sup> + H<sub>2</sub>O; (1b) solavetivol + NADPH + H<sup>+</sup> + O<sub>2</sub> = solavetivone + NADP<sup>+</sup> + 2 H<sub>2</sub>O

#### 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.