

## tryptophan 5-monooxygenase

Cat. No. EXWM-0956

Lot. No. (See product label)

### Introduction

#### Description

The active centre contains mononuclear iron(II). The enzyme is activated by phosphorylation, catalysed by a Ca<sup>2+</sup>-activated protein kinase. The 4a-hydroxytetrahydrobiopterin formed can dehydrate to 6,7-dihydrobiopterin, both spontaneously and by the action of EC 4.2.1.96, 4a-hydroxytetrahydrobiopterin dehydratase. The 6,7-dihydrobiopterin can be enzymically reduced back to tetrahydrobiopterin, by EC 1.5.1.34 (6,7-dihydropteridine reductase), or slowly rearranges into the more stable compound 7,8-dihydrobiopterin.

#### Synonyms

L-tryptophan hydroxylase; indoleacetic acid-5-hydroxylase; tryptophan 5-hydroxylase; tryptophan hydroxylase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.16.4

#### CAS No.

9037-21-2

#### Reaction

L-tryptophan + tetrahydrobiopterin + O<sub>2</sub> = 5-hydroxy-L-tryptophan + 4a-hydroxytetrahydrobiopterin

#### 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.