

tyrosine 3-monooxygenase

Cat. No. EXWM-0954

Lot. No. (See product label)

Introduction

Description

The active centre contains mononuclear iron(II). The enzyme is activated by phosphorylation, catalysed by EC 2.7.11.27, [acetyl-CoA carboxylase] 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-tyrosine hydroxylase; tyrosine 3-hydroxylase; tyrosine hydroxylase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.16.2

CAS No.

9036-22-0

Reaction

L-tyrosine + tetrahydrobiopterin + O₂ = L-dopa + 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.