

indoleamine 2,3-dioxygenase

Cat. No. EXWM-0571

Lot. No. (See product label)

Introduction

Description

A protohemoprotein. Requires ascorbic acid and methylene blue for activity. This enzyme has broader substrate specificity than EC 1.13.11.11, tryptophan 2,3-dioxygenase. It is induced in response to pathological conditions and host-defense mechanisms and its distribution in mammals is not confined to the liver. While the enzyme is more active with D-tryptophan than L-tryptophan, its only known function to date is in the metabolism of L-tryptophan. Superoxide radicals can replace O₂ as oxygen donor.

Synonyms

IDO (ambiguous); tryptophan pyrrolase (ambiguous); D-tryptophan:oxygen 2,3-oxidoreductase (decyclizing)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.13.11.52

CAS No.

9014-51-1

Reaction

(1) D-tryptophan + O₂ = N-formyl-D-kynurenine; (2) L-tryptophan + O₂ = N-formyl-L-kynurenine

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.