

Native *Myrothecium verrucaria* Bilirubin Oxidase

Cat. No. NATE-0094

Lot. No. (See product label)

Introduction

Description

In enzymology, a bilirubin oxidase (EC 1.3.3.5) is an enzyme that catalyzes the chemical reaction: $2 \text{ bilirubin} + \text{O}_2 \rightleftharpoons 2 \text{ biliverdin} + 2 \text{ H}_2\text{O}$. Thus, the two substrates of this enzyme are bilirubin and O₂, whereas its two products are biliverdin and H₂O. This enzyme belongs to the family of oxidoreductases, to be specific those acting on the CH-CH group of donor with oxygen as acceptor. This enzyme participates in porphyrin and chlorophyll metabolism.

Applications

Bilirubin oxidase is used to degrade bilirubin. Bilirubin oxidase, from *Myrothecium verrucaria*, may be used to determine free hemoglobin in icteric specimens. It also has potential application in dye effluent decolorization and is a potential treatment for neonatal jaundice.

Synonyms

bilirubin oxidase M-1; EC 1.3.3.5; 80619-01-8; Bilirubin:oxygen oxidoreductase; Bilirubin Oxidase

Product Information

Source

Myrothecium verrucaria

Form

lyophilized powder.

EC Number

EC 1.3.3.5

CAS No.

80619-01-8

Activity

15-65 units/mg protein

Unit Definition

One unit will oxidize 1.0 μmole of bilirubin per min at pH 8.4 at 37°C.

Storage and Shipping Information

Storage

–20°C