

Native *Bacillus pumilus* Bilirubin Oxidase/Laccase

Cat. No. NATE-1257

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 O_2 , whereas its two products are biliverdin and H_2O . 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.

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

Product Information

Source *Bacillus pumilus*

Form Lyophilized powder

Molecular Weight 61 kDa

Purity ~ 90% (SDS PAGE)

Isoelectric point 6.03

Optimum pH 6.5

Thermal stability 25°C - 70°C

Unit Definition One unit will oxidize 1.0 μmole of bilirubin per minute at pH 8.4 at 37°C or 1.0 μmole of syringaldazine per minute at pH 6.5 at 37 °C.

Storage and Shipping Information

Storage at -20°C