Creative Enzymes®

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 bilirubin + O2⇔ 2 biliverdin + 2 H2O. 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.
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 syringaldizine per minute at pH 6.5 at 37 °C.

Storage and Shipping Information

Storage	at -20°C