

Bilirubin oxidase from Microorganism

Product Information

Cat#	NATE-1713
Abbr	BOD (Microorganism)
Similar	Bilirubin Oxidase
Source	Microorganism
Description	In enzymology, a bilirubin oxidase (EC 1.3.3.5) is an enzyme that catalyzes the chemical reaction: $2 \text{ bilirubin} + \text{O}_2 \leftrightarrow 2 \text{ biliverdin} + 2 \text{ H}_2\text{O}$. Thus, the two substrates of this enzyme are bilirubin and O ₂ , whereas its two products are biliverdin and H ₂ O. 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.
Form	Blue powder, lyophilized
Enzyme Commission Number	EC 1.3.3.5
Activity	>20U/mg
CAS No.	80619-01-8
Isoelectric point	5.2
pH Stability	7.5~10.5 (25°C, 18hr)
Michaelis Constant	1.2×10^{-4} M(Bilirubin, pH 8.0)
Unit Definition	One unit will convert one micromole of bilirubin to biliverdin per min at pH 8.0 at 25°C.
Optimum pH	7.5
Optimum temperature	37°C
Thermal stability	< 50°C(pH 7.0, 30min)



Creative Enzymes

Diagnostic Enzymes

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Storage	Store at -20°C.
Inhibitors	NaN ₃ , KCN
Synonyms	bilirubin oxidase M-1; bilirubin oxidase; EC 1.3.3.5; bilirubin: oxygen oxidoreductase