

Bilirubin oxidase from Microorganism

Product Information

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| 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 bilirubin + O ₂ ↔ 2 biliverdin + 2 H ₂ 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 |