

## Bilirubin oxidase from Microorganism

### Product Information

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



**Creative Enzymes**

*Diagnostic Enzymes*

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