

## 32-4921: Recombinant E.Coli Superoxide Dismutase

**Alternative Name :** Superoxide dismutase [Mn],MnSOD,soda,b3908,JW3879.

### Description

Source : Escherichia Coli. SODA produced in E.Coli is a single, non-glycosylated polypeptide chain containing 226 amino acids (1-206 a.a.) and having a molecular mass of 25.2kDa.SODA is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Superoxide dismutase Mn (soda) belongs to the iron/manganese superoxide dismutase family. SodA destroys radicals that are typically produced within the cells and which are toxic to biological systems. SodA works by catalyzing the dismutation of the superoxide radical O<sub>2</sub><sup>-</sup> to O<sub>2</sub> and H<sub>2</sub>O<sub>2</sub>, which are then metabolized to H<sub>2</sub>O and O<sub>2</sub> by catalase and glutathione peroxidase.

### Product Info

|                            |  |
|----------------------------|--|
| <b>Amount :</b>            | 20 µg  |
| <b>Purification :</b>      | Greater than 95% as determined by SDS-PAGE.  |
| <b>Content :</b>           | SODA E.coli solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 10% glycerol and 0.1M NaCl.   |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.                        |
| <b>Amino Acid :</b>        | MGSSHHHHHH SSSLVPRGSH MSYTLPSLPY AYDALEPHFD KQTMEIHHTK HHQTYVNNAN AALESLEPEFA NLPVEELITK LDQLPADKKT VLRNNAGGHA NHSLFWKGLK KGTTLQGDLEK AAIERDFGSV DNFKAEFEKA AASRFGSGWA WLVLKGDKLA VVSTANQDSP LMGEAISGAS GFPIMGLDVW EHAYLKFQN RRPDYIKEFW NVVNWDEAAA RFAAKK. |

### Application Note

Specific activity is > 350 units/mg, in which one unit will inhibit the rate of reduction of cytochrome c by 50% in a coupled system, using xanthine and xanthine oxidase at pH 7.8 at 25°C in a 1.5 ml reaction volume.

