

## Native Bovine Superoxide Dismutase

Cat. No. NATE-1870

Lot. No. (See product label)

### Introduction

**Description** The superoxide (O<sub>2</sub><sup>-</sup>) ion is believed to be responsible for lipid peroxidation and peroxidative hemolysis of erythrocytes. The action of superoxide dismutase, therefore, results in protection of the biological integrity of cells and tissues against the harmful effects of superoxide free radicals. Superoxide dismutase is widely distributed in both plants and animals. It occurs in high concentrations in brain, liver, heart, erythrocytes and kidney. Three superoxide dismutases have been characterized according to their metal content. The enzyme from bovine and human erythrocytes contains copper and zinc, the one from chicken and rat liver mitochondria contains manganese while the enzyme from E. coli contains iron. Superoxide dismutase from bovine erythrocytes has a molecular weight of 32,500.

**Synonyms** Superoxide dismutases; EC 1.15.1.1; superoxidase dismutase; copper-zinc superoxide dismutase; Cu-Zn superoxide dismutase; ferrisuperoxide dismutase; superoxide dismutase I; superoxide dismutase II; SOD; Cu,Zn-SOD; Mn-SOD; Fe-SOD; SODF; SODS; SOD-1; SOD-2; SOD-3; SOD-4; hemocuprein; erythrocuprein; cytocuprein; cuprein ; hepatocuprein; 9054-89-1

### Product Information

**Species** Bovine

**Source** Bovine Kidney

**Form** Freeze-dried powder

**EC Number** EC 1.15.1.1

**CAS No.** 9054-89-1

**Purity** 0.95

**Activity** 3000 U/mg protein

**Solubility** Soluble in distilled water or dilute buffer

**Unit Definition** That amount of enzyme which, under specified conditions of the assay, will cause a 50% inhibition in the rate of reduction of ferricytochrome C.

### Storage and Shipping Information

**Storage** Store at -20° C