

Cu/Zn Superoxide Dismutase Polyclonal Antibody

ORDERING INFORMATION

Catalog No.: 13002

Size: 100ul, 1mg/ml

BACKGROUND

Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme that catalyzes the dismutation of the superoxide radical O_2^- to oxygen and hydrogen peroxide which are then metabolized to H_2O and O_2 by catalase and glutathione peroxidase. SODs play an important role in antioxidant defense mechanisms. Three different SOD isoenzymes are found in mammalian cells. SOD1 contains copper and zinc ions and exists as a 32 kDa dimer in the cytosol. SOD2 contains manganese and is present as an 80 kDa tetramer in the mitochondrial matrix. SOD3 (or extracellular/EC SOD) contains copper and zinc, like SOD1, but it is a 30 kDa homotetramer found only in the extracellular space.

SPECIFICATION SUMMARY

Antigen: Human Cu/Zn SOD

Host Species: Rabbit

Format: Antigen affinity purified

Buffer: PBS, pH 7.0, 0.1% sodium azide, 50% glycerol.

SPECIFICITY

This antibody detects a 23 kDa protein in human (and a 19 kDa protein in other species) on SDS-PAGE immunoblots, corresponding to the molecular mass of Cu/Zn SOD. This antibody recognizes human, monkey, bovine, mouse, rat, canine, hamster, pig, sheep, rabbit, and *Xenopus* Cu/Zn SOD.

APPLICATIONS

Western Blot: 0.2ug/ml

Immunohistochemistry: 1ug/ml

Immunoprecipitation: 10ug/ml

ELISA: enduser should determine optimal concentration.

Positive control: HeLa cell lysate

STORAGE AND STABILITY

Store product at $-20^{\circ}C$ for at least one year.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.