Creative Enzymes®

Superoxide Dismutase from Human, Recombinant

Cat. No. NATE-1657

Lot. No. (See product label)

Introduction

Description Superoxide dismutase (SOD) catalyzes the dismutation of superoxide radicals to hydrogen peroxide and molecular oxygen. SOD plays a critical role in the defense of cells against the toxic effects of oxygen radicals. SOD competes with nitric oxide (NO) for superoxide anion (which reacts with NO to form peroxynitrite), thereby SOD promotes the activity of NO. SOD has also been shown to suppress apoptosis in cultured rat ovarian follicles, neural cell lines, and transgenic mice by preventing the conversion of NO to peroxynitrate, an inducer of apoptosis.

Synonyms Superoxide dismutase [Cu-Zn]; EC 1.15.1.1; SOD1; SOD; ALS; ALS1; IPOA

Product Information

Species Human

Source E. coli

Form Lyophilized powder

EC Number EC 1.15.1.1

Molecular Weight 16.8 kDa (monomer), 33.6 kDa (homodimer)

Purity > 95% by SDS-PAGE

Activity ~40,000 U/mg

Endotoxin Level <0.1 ng/μg

Unit Definition One unit is defined as the amount of enzyme that will cause a 50% reduction of the rate of WST-1 formazan formation.

Usage and Packaging

Reconstitution Reconstitute in H2O to a concentration >100 ug/ml. The solution can then be diluted into other aqueous buffers.

Storage and Shipping Information

Storage Store at -20°C