Creative Enzymes®

Superoxide Dismutase 2 from Human, Recombinant

Cat. No. NATE-1658

Lot. No. (See product label)

Introduction

Description	SOD2 is part of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. SOD2 binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in SOD2 gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. SOD2 destroys radicals which are usually produced within the cells and which are toxic to biological systems.
Synonyms	Superoxide dismutase [Mn]; mitochondrial; IPOB; MNSOD; MVCD6

Product Information

Species	Human
Source	E. coli
Form	Liquid
EC Number	EC 1.15.1.1
Molecular Weight	24.4 kDa (219 aa, 25-222 aa + His Tag)
Purity	> 95% by SDS-PAGE
Activity	> 1,200 units/mg
Unit Definition	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.

Storage and Shipping Information

Storage	Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at - 20°C or -70°C. Avoid repeated freezing and thawing cycles.