Creative Enzymes®

Native Murine Catalase

Cat. No. NATE-0110

Lot. No. (See product label)

Introduction

Description	Catalase activates the decomposition of hydrogen peroxide, a reactive oxygen species, into water and oxygen. It functions as a natural antioxidant, protecting cells against oxidative damage to proteins, lipids and nucleic acids. Catalase has also been used to study the role reactive oxygen species play in gene expression and apoptosis.
Synonyms	EC 1.11.1.6; Catalase; catalase; equilase; caperase; optidase; catalase-peroxidase; CAT; H2O2:H2O2 oxidoreductase

Product Information

Species	Murine
Source	murine liver
Form	ammonium sulfate suspension
EC Number	EC 1.11.1.6
CAS No.	9001-05-2
Molecular Weight	tetramer mol wt ~250 kDa
Activity	> 500 units/mg protein
Optimum pH	~7.0
Buffer	Suspension in 2.7 M (NH4)2SO4 solution, pH 6.5
Pathway	Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Cellular responses to stress, organism-specific biosystem; FoxO signaling pathway, organism-specific biosystem
Function	NADP binding; aminoacylase activity; antioxidant activity
Unit Definition	One unit will decompose 1.0 μmole of H2O2 per min at pH 7.0 at 25°C, while the H2O2 conc. falls from 10.3 to 9.2 mM.

Storage and Shipping Information

Stability	2-8°C