

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