Creative Enzymes®

Catalase from Psychrotolerant Bacteria, recombinant (Lyophilized Powder)

Cat. No. NATE-1700

Lot. No. (See product label)

Introduction

Description	Catalase is an enzyme that catalyzes the transformation of hydrogen peroxide into water and oxygen. This enzyme functions as a natural antioxidant protecting the cell against oxidative damage. This enzyme finds applications in Research and Clinical Chemistry. It also finds diverse industrial applications in textiles, waste treatment, cosmetics and as a disinfectant agent.
Synonyms	EC 1.11.1.6; Catalase; equilase; caperase; optidase; catalase-peroxidase; CAT; H2O2:H2O2 oxidoreductase

Product Information

Species	Psychrotolerant Bacteria
Source	E. coli
Form	Lyophilized Powder
EC Number	EC 1.11.1.6
CAS No.	2593710
Molecular Weight	~220 kDa
Activity	> 8000 U/mg protein
Concentration	Protein concentration: >40% (w/w)
pH Stability	4.0-9.5
Optimum pH	7.5
Thermal stability	20-80°C, Keeps 50% of its activity after 7 hours of exposure at 50°C.
Optimum temperature	30-40°C
Buffer	0.05M Tris HCl pH 8; 0.5M NaCl and glycerol at 20%
Unit Definition	One unit is defined as the decomposition of 1umol of H2O22 in 1 Unit Definition minute at 25°C at pH 7.0. The rate of disappearance of H2O2 is observed at 240 nm.

Storage and Shipping Information

Storage	At -20°C, it keeps 100% of its activity for more than two years