

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 H₂O₂ 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