Recombinant Human CAT / Catalase Protein (His tag)

Cat.NO.: TP06290

3th Edition

Synonyms:MGC138422;MGC138424

Description: Catalase is a ubiquitously expressed enzyme that catalyzes the decomposition of hydrogen peroxide to water and oxygen. It is a tetramer of four polypeptides chains containing four porphyrin heme groups that allow the enzyme to react with the hydrogen peroxide. The optimum PH of human catalase is approximately 7 and the optimum temperature is at 37 degree. Both the PH optimum and temperature for other catalases varies depending on the species. Catalase can be inhibited by a flux of O2- generated in situ by the aerobic xanthine oxidase reaction. This inhibition of catalase by O2- provides the basis for a synergism between superoxide dismutase and catalase.Such synergisms have been observed in vitro and may be significant in vivo. Catalase is used in the food industry for removing hydrogen peroxide from milk prior to cheese production. Another use is in food wrappers where it prevents food from oxidizing. Catalase is also used in the textile industry, removing hydrogen peroxide from fabrics to make sure the material is peroxide-free.

Form:PBS

Molecular Weight:61.9 kDa

Sequences: Ala 2-Leu 527

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.