

Catalase

Cat: YS143630

Specification: 5g /25g /100g

Storage: Store at -20°C, and it is valid for 2 years.

Product Information

CAS: 9001-05-2

English name: Catalase

Appearance (Character): Brown liquid

Molecular Formula: C₉H₁₀O₃

Molecular Weight: 166.17

Optimal Temperature: 40°C

Optimal pH: 6.8

Purity: ≥200,000 units/g

Solubility: Soluble in water and dilute buffer solutions, insoluble in organic solvents.

Introduction

Catalase, an enzyme that metabolizes hydrogen peroxide, also reacts with many other substrates. The active site of catalase contains an iron atom. Human catalase consists of four identical subunits, with each subunit containing four distinct structural domains and an artificial heme group. These four structural domains include: (1) The N-terminal arm, which contains the terminal histidine (an amino acid essential for the catalase reaction). (2) The β-barrel domain, which comprises eight β-barrels arranged in an antiparallel fashion. Six α-helices are inserted into this domain, providing the hydrophobic core necessary for the three-dimensional structure of the protein. (3) The linker domain, which contains the tyrosine residue that binds to the heme group. (4) The α-helical domain, which is crucial for NADPH binding.

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.