

## Catalase, Human Erythrocytes

<b>CATALOG #:</b>	4712-1000
<b>AMOUNT:</b>	1 mg
<b>SOURCE:</b>	Human Erythrocyte. Shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.
<b>PURITY:</b>	≥95% by SDS-PAGE
<b>MOLECULAR WT:</b>	244,000; $\epsilon_{0.1\%}$ (280 nm) = 1.39
<b>NATIVE STRUCTURE:</b>	Homotetramer
<b>SUBUNIT:</b>	59,700
<b>FORM:</b>	Frozen in 50 mM Tris-HCl, pH 8.0
<b>STORAGE:</b>	-70°C or lower
<b>ACTIVITY:</b>	> 50,000 units per mg protein. One unit is equal to the amount of enzyme that will decompose one micromole of hydrogen peroxide per minute at 25°C, pH 7.0.
<b>DESCRIPTION:</b>	Composed of four identical subunits each with a molecular weight of 59,700. Catalyzes the reaction $2\text{H}_2\text{O}_2$ to $\text{H}_2\text{O} + \text{O}_2$ . Catalase, along with the superoxides dismutase and glutathione peroxidase, controls the levels of oxygen-derived free radicals in mammalian cells, and together may function as a somatic oxidant defense.

### RELATED PRODUCTS:

- Catalase Assay Kit (**Cat. No. K773-100**)
- Catalase Polyclonal Antibody (**Cat. No. 3806-100**)

### OTHER RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- LDH-Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

#### Cell Damage & Repair

- HDAC & HAT Fluorometric & Colorimetric Assays & Drug Discovery Kits
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits
- SOD Assay Kit

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

#### Metabolism Assays

- Glucose, Fructose, Galactose, Maltose & more assays
- Lactate, Pyruvate, Glycogen, Sarcosine assays
- Cholesterol, HDL/LDL, Triglyceride, CETP, PLTP assays

#### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit

#### Cytokines & Growth Factors

#### Monoclonal & Polyclonal Antibodies

**FOR RESEARCH USE ONLY! Not to be used on humans.**