

Recombinant Human CAT Protein, His-tagged

Cat. No. CAT-654H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CAT(Ala401~Glu523) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Ala401~Glu523
Description	This gene encodes catalase, a key antioxidant enzyme in the bodies defense against oxidative stress. Catalase is a heme enzyme that is present in the peroxisome of nearly all aerobic cells. Catalase converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide. Oxidative stress is hypothesized to play a role in the development of many chronic or late-onset diseases such as diabetes, asthma, Alzheimer's disease, systemic lupus erythematosus, rheumatoid arthritis, and cancers. Polymorphisms in this gene have been associated with decreases in catalase activity but, to date, acatalasemia is the only disease known to be caused by this gene.
Form	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Molecular Mass	19.7kDa
Endotoxin	<1.0EU per 1ug (determined by the LAL method)

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Purity	> 95%
Applications	Positive Control; Immunogen; SDS-PAGE; WB. If bio-activity of the protein is needed, please check active protein
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Reconstitution	Reconstitute in PBS or others

GENE INFORMATION

Gene Name	CAT catalase [Homo sapiens]
Official Symbol	CAT
Synonyms	CAT; catalase; MGC138422; MGC138424;
Gene ID	847
mRNA Refseq	NM_001752
Protein Refseq	NP_001743
MIM	115500

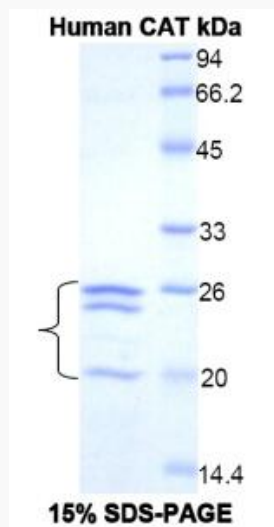
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UniProt ID

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