

**P92418Hu04**  
**Catalase (CAT)**  
**Organism: Homo sapiens (Human)**  
*Instruction manual*

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

4th Edition (Revised in August, 2012)

## **[ DESCRIPTION ]**

**Protein Names:** Catalase  
**Synonyms:** CAT  
**Species:** Human  
**Size:** 100µg  
**Source:** *Escherichia coli*-derived  
**Subcellular Location:** Peroxisome.

## **[ PROPERTIES ]**

**Residues:** Gly32~Ser167 (Accession # P04040), with N-terminal His-Tag.  
**Grade & Purity:** >95%, 17 kDa as determined by SDS-PAGE reducing conditions.  
**Formulation:** Supplied as liquid form in Phosphate buffered saline(PBS), pH 7.4.  
**Endotoxin Level:** <1.0 EU per 1µg (determined by the LAL method).  
**Applications:** SDS-PAGE; WB; ELISA; IP.  
(May be suitable for use in other assays to be determined by the end user.)  
**Predicted Molecular Mass:** 17.4 kDa  
**Predicted isoelectric point:** 6.8

## **[ PREPARATION ]**

Reconstitute in sterile PBS, pH7.2-pH7.4.



## [ STORAGE AND STABILITY ]

**Storage: Avoid repeated freeze/thaw cycles.**

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

## [ SEQUENCES ]

The target protein is fused with N-terminal His-Tag, its sequence is listed below.

MGHHHHHSGSEFELRRQAC-GNPVGDKLVITVGPRGPLLVDVFTDEMAHFDRERIPERVHAKGAGAFGYFEVTHDITKYSK  
AKVFEHIGKKTPIAVRFSTVAGESGSADTVRDPGRGFAVKFYTEDGNWDLVGNNTPIFFIRDPIPFPSFIHS

## [ REFERENCES ]

1. Quan F., *et al.* (1986) *Nucleic Acids Res.* 14:5321-5335.
2. Bell G.I., *et al.* (1986) *Nucleic Acids Res.* 14:5561-5562.
3. Jin L.H., *et al.* (2001) *Free Radic. Biol. Med.* 31:1509-1519.
4. Ota T., *et al.* (2004) *Nat. Genet.* 36:40-45.

