

**CAT, 1-527aa, Human, His tag, E.coli**

**Cat.NO.: TP01434**

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3th Edition

**Synonyms:**Catalase.

**Description:**CAT is a key antioxidant enzyme in the bodies defense against oxidative stress. Also, it is a heme enzyme that is present in the peroxisome of nearly all aerobic cells. CAT converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide.

**Form:**Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol

**Molecular Weight:**61.9 kDa (547aa)

**Sequences:**

MGSSHHHHHSSGLVPRGSHMADSRDPASDQMWHKEQRAAQKADVLTTGAGNPVGDKLNVITVGPRGPPLVQ  
DVVFTDEMAHFDRERIPERVVHAKGAGAFGYFEVTHDITKYSKAKVFEHIGKKTPIAVRFSTVAGESGSADTVRDPR  
GFAVKFYTEDGNWDLVGNNTPIFFIRDPILFPSFIHSQKRNPQTHLKDPDMVVWDFWSLRPESLHQVSFLSDRGIPD  
GHRHMNGYGSHTFKLVNANGEAVYCKFHYKTDQGIKNLSVEDAARLSQEDPDYGIRDLFNAITGKYPSTFYIQV  
MTFNQAETFPFNPFDLTKVWPHKDYLIPVGKLVLRNPVNYFAEVEQIAFDPSNMPPGIEASPDKMLQGRLFAYP  
DTHRHLGPNYLHIPVNCPYRARVANYQRDGPMCMQDNQGGAPNYPNSFGAPEQQPSALEHSIQYSGEVRRFN  
TANDDNVTQVRAFYVNVLNEEQRKRLCENIAGHLKDAQIFIQKKAVKNFTEVHPDYGSHIQALLDKYNAEKPKNAIH  
TFVQSGSHLAAREKANL

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml

**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.