

Product datasheet for **TP720852**

Catalase (CAT) (NM_001752) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human catalase (CAT)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Ala2-Leu527
Tag:	Tag Free
Predicted MW:	59.7 kDa
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Supplied as a 0.2 um filtered solution of PBS, pH 7.4.
Endotoxin:	Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)
Storage:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_001743
Locus ID:	847
UniProt ID:	P04040
RefSeq Size:	2300
Cytogenetics:	11p13
RefSeq ORF:	1581



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Summary:

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. [provided by RefSeq, Oct 2009]

Protein Families:

Druggable Genome

Protein Pathways:

Amyotrophic lateral sclerosis (ALS), Metabolic pathways, Methane metabolism, Tryptophan metabolism