

Product datasheet for TP720852XL

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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 Free Tag: **Predicted MW:** 59.7 kDa

Purity: >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

Endotoxin: Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)

Store at -80°C. Storage:

Stable for at least 3 months from date of receipt under proper storage and handling Stability:

conditions.

NP 001743 RefSeq:

Locus ID: 847

UniProt ID: P04040, A0A384P5Q0

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