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Anti-Catalase Picoband Antibody

Catalog # ABO12610

Product Information

Application	WB, IHC-P
Primary Accession	P04040
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Catalase(CAT) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	847
Other Names	Catalase, 1.11.1.6, CAT
Calculated MW	59756
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Peroxisome.
Source	Eukaryota
Protein Name	Catalase
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human Catalase recombinant protein (Position: E344-L527). Human Catalase shares 85.3% and 82.6% amino acid (aa) sequence identity with mouse and rat Catalase, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

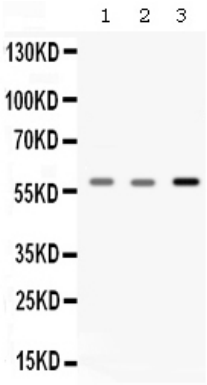
Protein Information

Name	CAT
Function	Catalyzes the degradation of hydrogen peroxide (H(2)O(2)) generated by peroxisomal oxidases to water and oxygen, thereby protecting cells from the toxic effects of hydrogen peroxide (PubMed:7882369). Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells (PubMed:7882369).
Cellular Location	Peroxisome matrix

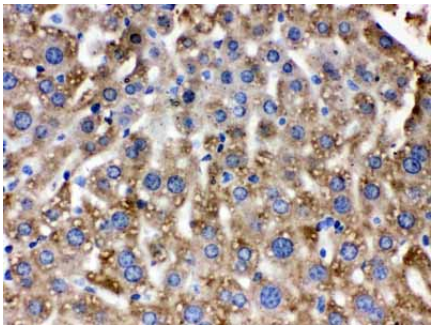
Background

Catalase is a key antioxidant enzyme in the bodies defensing against oxidative stress. It is also 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.

Images

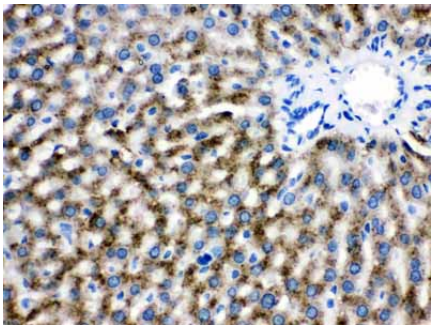


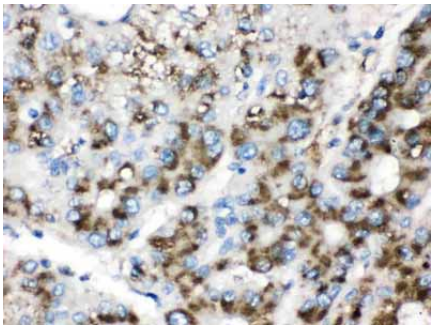
Western blot analysis of Catalase expression in rat skeletal muscle extract (lane 1), mouse skeletal muscle extract (lane 2) and A549 whole cell lysates (lane 3). Catalase at 60KD was detected using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .



Catalase was detected in paraffin-embedded sections of mouse liver tissues using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .

Catalase was detected in paraffin-embedded sections of rat liver tissues using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .





Catalase was detected in paraffin-embedded sections of human liver cancer tissues using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

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