10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Catalase Picoband Antibody

Catalog # ABO12610

Specification

Anti-Catalase Picoband Antibody - 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.

Anti-Catalase Picoband Antibody - Additional Information

Gene ID 847

Other Names
Catalase, 1.11.1.6, CAT

Calculated MW
59756 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Peroxisome.

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.**

Anti-Catalase Picoband Antibody - 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

Anti-Catalase Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Catalase Picoband Antibody - Images

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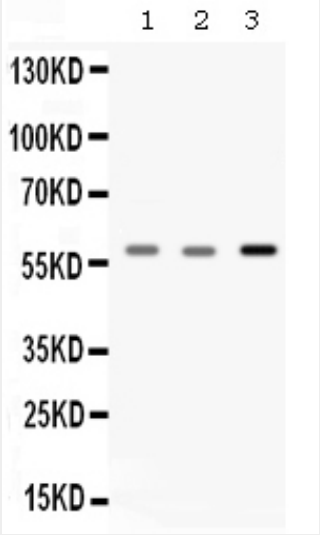
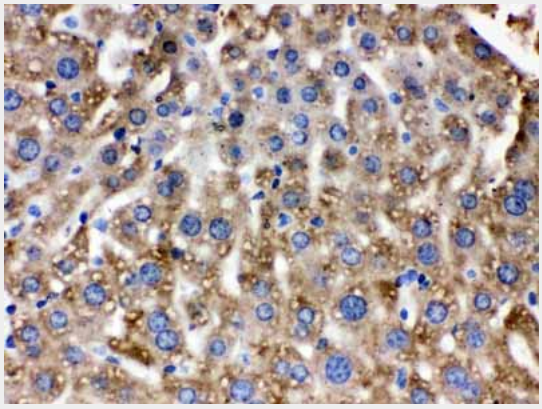
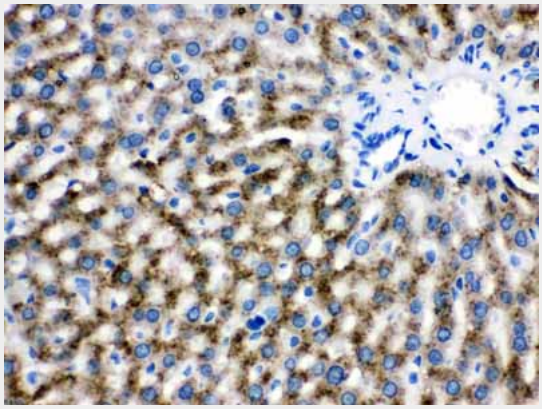


Western blot analysis of Catalase expression in rat skeletal muscle extract (lane 1), mouse skeletal muscle extract (lane 2) and A549 whole cell lysates (lane 3). Catalase at 60KD was detected using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 0.5 Î¼g/mL. 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 .



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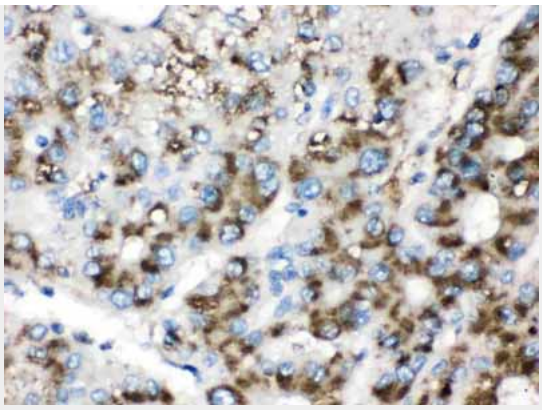

Catalase was detected in paraffin-embedded sections of human liver cancer tissues using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog # ABO12610) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-Catalase Picoband Antibody - 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.