

Datasheet for ABIN4886504
anti-Catalase antibody (AA 344-527)



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4 Images

Overview

Quantity:	100 µg
Target:	Catalase (CAT)
Binding Specificity:	AA 344-527
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Catalase antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Catalase(CAT) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Catalase(CAT) detection. Tested with WB, IHC-P in Human,Mouse,Rat.</p> <p>Gene Name: catalase</p> <p>Protein Name: Catalase</p>

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: Catalase (CAT)

Alternative Name: CAT ([CAT Products](#))

Background: Catalase is a key antioxidant enzyme in the bodies defending 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.

Synonyms: Cas1 | CAT | Catalase | Cs1 | P04040

Gene ID: 847

UniProt: [P04040](#)

Pathways: [Cellular Glucan Metabolic Process](#), [Cell RedoxHomeostasis](#), [Photoperiodism](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.
Notes: Tested Species: Species with positive results. Other applications have not been tested.
Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

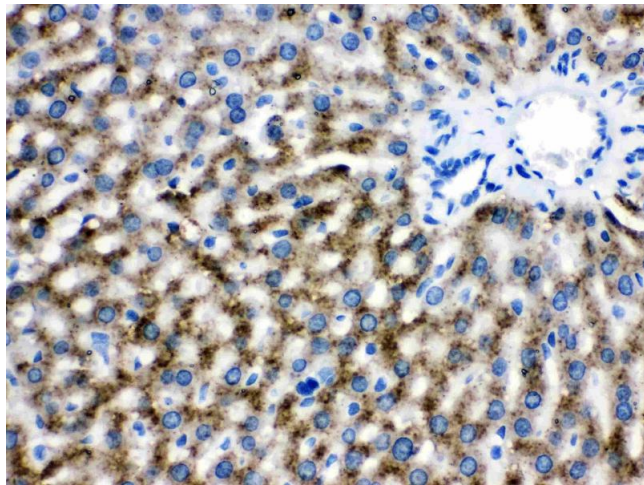
Handling

Format: Lyophilized

Handling

Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, 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.

Images



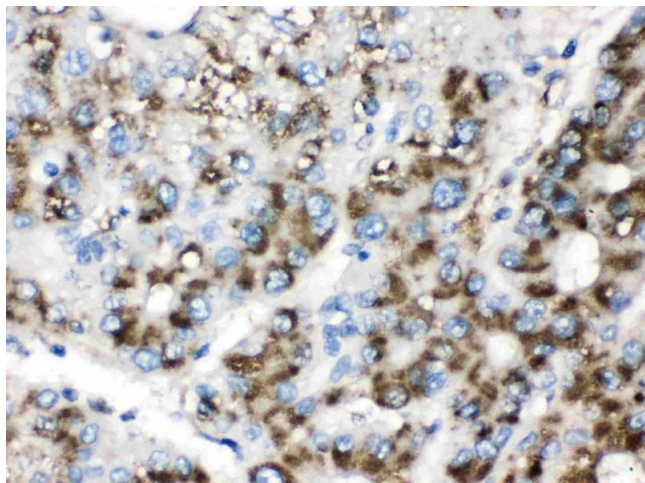
Immunohistochemistry

Image 1. Catalase was detected in paraffin-embedded sections of rat liver tissues using rabbit anti- Catalase Antigen Affinity purified polyclonal antibody (Catalog #) at 1 µg/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).



Western Blotting

Image 2. 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 #) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).



Immunohistochemistry

Image 3. Catalase was detected in paraffin-embedded sections of human liver cancer tissues using rabbit anti-Catalase Antigen Affinity purified polyclonal antibody (Catalog #) at 1 µg/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN4886504.