

For Research Use Only

# Catalase Polyclonal antibody

Catalog Number: 21260-1-AP

Featured Product

170 Publications



## Basic Information

### Catalog Number:

21260-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG15383

### GenBank Accession Number:

BC112219

### GeneID (NCBI):

847

### UNIPROT ID:

P04040

### Full Name:

catalase

### Calculated MW:

60 kDa

### Observed MW:

60 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:16000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:250-1:1000

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, chicken, bovine, goat, sheep, bat, meretrix meretrix

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HeLa cells, rat liver tissue, Raji cells, Jurkat cells, HepG2 cells, L02 cells, mouse liver tissue

**IP**: HeLa cells,

**IHC**: human liver cancer tissue, human hepatocirrhosis tissue

## Background Information

Catalase belongs to the catalase family. CAT occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide. CAT promotes the growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells, and normal and transformed fibroblast cells. CAT catalyzes the reaction:  $2\text{H}_2\text{O}_2 = \text{O}_2 + 2\text{H}_2\text{O}$ . Defects in CAT are the cause of acatalasia (ACATLAS) which is also known as acatalasemia.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wei Cai	36170234	Autophagy	IF
Lin-Yu Jin	36164394	Oxid Med Cell Longev	WB
Hong Zou	36139126	Biomolecules	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

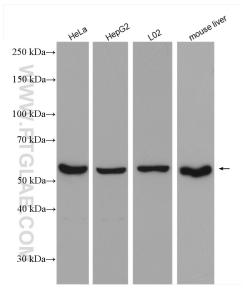
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

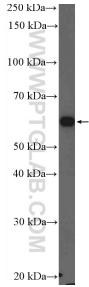
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

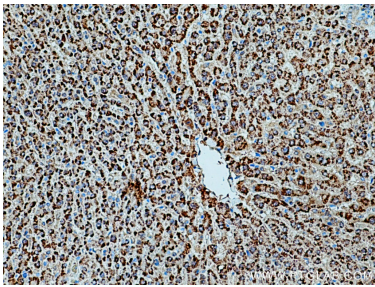
Selected Validation Data



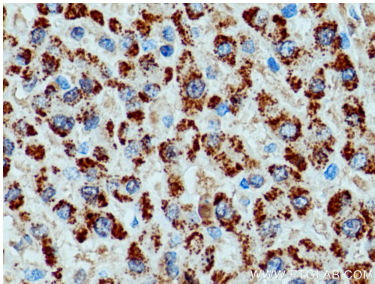
Various lysates were subjected to SDS PAGE followed by western blot with 21260-1-AP (Catalase antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



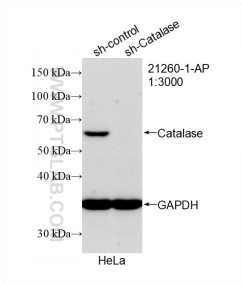
Jurkat cells were subjected to SDS PAGE followed by western blot with 21260-1-AP (Catalase Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



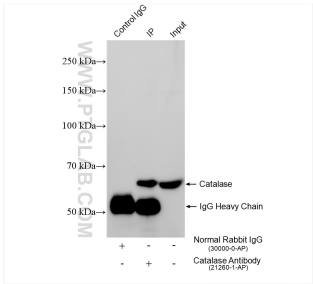
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 21260-1-AP (Catalase antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 21260-1-AP (Catalase antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of Catalase antibody (21260-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Catalase transfected HeLa cells.



IP result of anti-Catalase (IP:21260-1-AP, 4ug; Detection:21260-1-AP 1:10000) with HeLa cells lysate 1280 ug.