

For Research Use Only

# Cathepsin A Polyclonal antibody

Catalog Number: 15020-1-AP

8 Publications



## Basic Information

### Catalog Number:

15020-1-AP

### Size:

150ul , Concentration: 650 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7073

### GenBank Accession Number:

BC000597

### GeneID (NCBI):

5476

### UNIPROT ID:

P10619

### Full Name:

cathepsin A

### Calculated MW:

54 kDa

### Observed MW:

54-60, 32, 20 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

IHC 1:750-1:3000

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**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 : A549 cells, Sp2/O cells, PC-3 cells, DU 145 cells

IHC : human liver tissue, human breast cancer tissue, rat kidney tissue

## Background Information

CTSA is also named as PPGB(protective protein for beta-galactosidase), PPCA(protective protein cathepsin A), cathepsin A, carboxypeptidase C, carboxypeptidase L and belongs to the peptidase S10 family. It is a ubiquitously expressed multifunctional enzyme, with deamidase, esterase, and carboxypeptidase activities and a preference for substrates with hydrophobic amino acid residues at the P1-prime position. It can be cleaved into the following 2 chains and defects in CTSA are the cause of galactosialidosis (GSL). This protein has 2 glycosylation sites. CTSA is synthesized as a 54-kDa precursor protein and composed of 32- and 20-kDa subunits linked together by disulfide bonds(PMID: 16461364,19574551).

## Notable Publications

Author	Pubmed ID	Journal	Application
David H Allendorf	35693885	Front Cell Neurosci	WB
Huaxiang Wang	34272452	Sci Rep	IHC
Yan You	29452206	J Hepatol	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

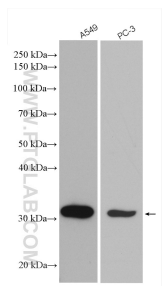
For technical support and original validation data for this product please contact:

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

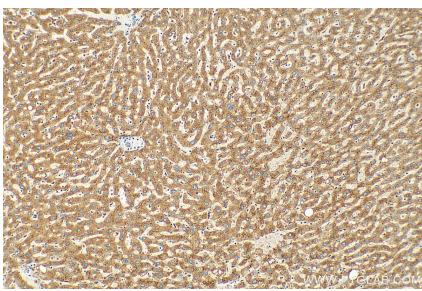
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

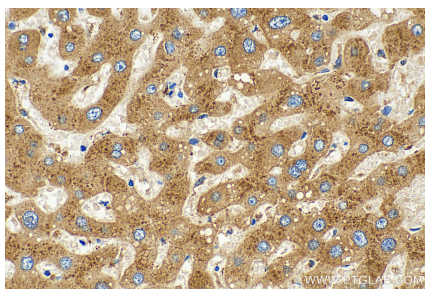
Selected Validation Data



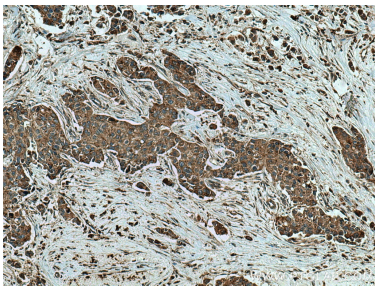
Various lysates were subjected to SDS PAGE followed by western blot with 15020-1-AP (Cathepsin A antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



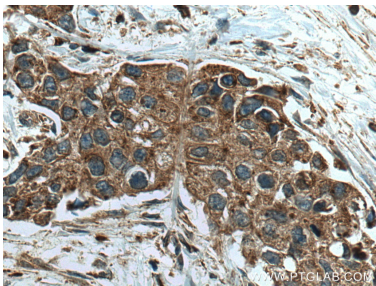
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



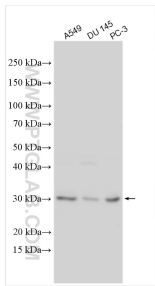
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:1500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



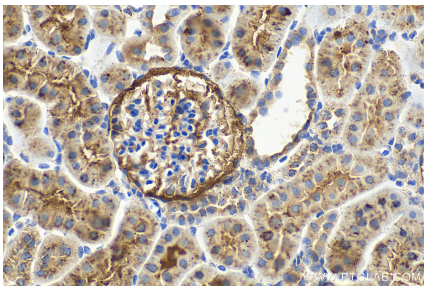
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



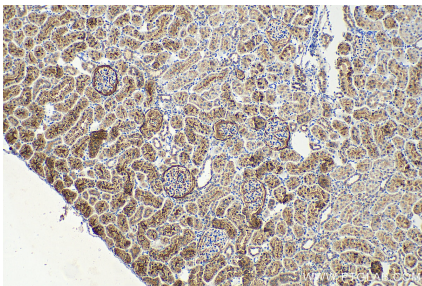
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 15020-1-AP (Cathepsin A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:1500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 15020-1-AP (Cathepsin A antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).