

For Research Use Only

# Cathepsin D Polyclonal antibody

Catalog Number: 21327-1-AP

Featured Product

125 Publications



## Basic Information

### Catalog Number:

21327-1-AP

### Concentration:

700 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG15254

### GenBank Accession Number:

BC016320

### GeneID (NCBI):

1509

### UNIPROT ID:

P07339

### Full Name:

cathepsin D

### Calculated MW:

412 aa, 45 kDa

### Observed MW:

32 kDa, 48 kDa, 52 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:500-1:2000

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat, pig, bovine

**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:** A375 cells, HCT 116 cells, HuH-7 cells, HepG2 cells, MCF-7 cells

**IHC:** human hepatocirrhosis tissue,

**IF/ICC:** MCF-7 cells, A431 cells

## Background Information

CTSD (Cathepsin D) also named CPSD, belongs to the peptidase A1 family. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Human CTSD is synthesized as a 52-kDa precursor that is converted into an active 48-kDa single-chain intermediate in the endosomes, and then into a fully active mature form, composed of a 34-kDa heavy chain and a 14-kDa light chain, in the lysosomes. It is a lysosomal acid protease found in neutrophils and monocytes and involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease (PMID: 27114232, PMID: 30717773, PMID: 30051532).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yang Yang	32962728	J Exp Clin Cancer Res	WB
Yong Fan	34560177	Food Chem Toxicol	WB
Haojie Zhang	36114802	Phytother Res	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

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

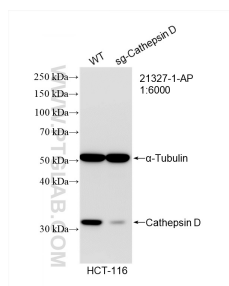
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

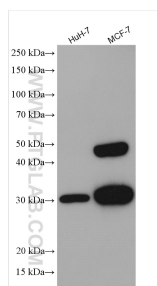
W: [ptgcn.com](http://ptgcn.com)

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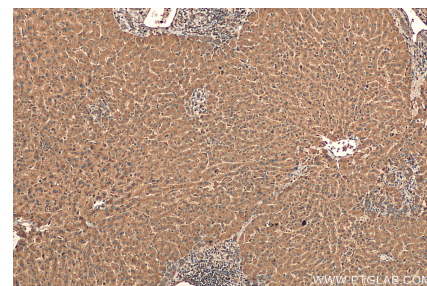
## Selected Validation Data



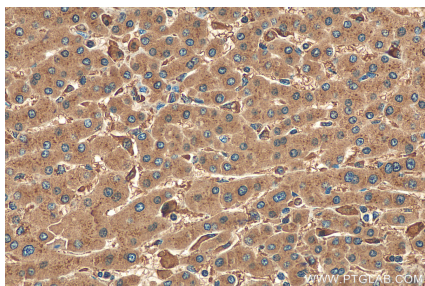
WB result of Cathepsin D antibody (21327-1-AP; 1:6000; room temperature for 1.5 hours) with wild-type and sg-Cathepsin D transfected HCT-116 cells.



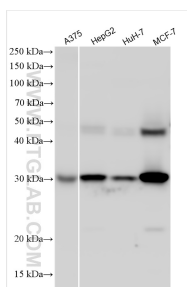
Various lysates were subjected to SDS PAGE followed by western blot with 21327-1-AP (Cathepsin D antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



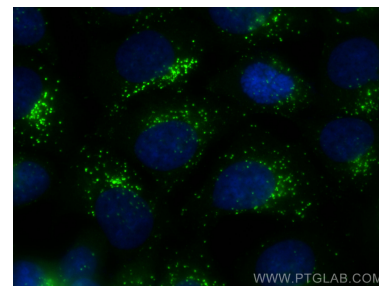
Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 21327-1-AP (Cathepsin D antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



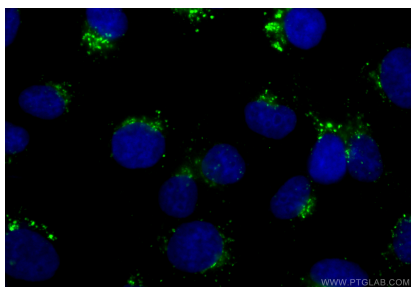
Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 21327-1-AP (Cathepsin D antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 21327-1-AP (Cathepsin D antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using Cathepsin D antibody (21327-1-AP) at dilution of 1:400 and Multi-rAb Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using Cathepsin D antibody (21327-1-AP) at dilution of 1:200 and Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (SA00013-2).