

For Research Use Only

# Cathepsin D Polyclonal antibody

Catalog Number: 55021-1-AP

8 Publications



## Basic Information

### Catalog Number:

55021-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop and 473 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_001909

### GeneID (NCBI):

1509

### UNIPROT ID:

P07339

### Full Name:

cathepsin D

### Calculated MW:

45 kDa

### Observed MW:

32 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

### Positive Controls:

WB : A431 cells, HepG2 cells, MCF-7 cells

IHC : human liver tissue,

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

## Background Information

CTSD (Cathepsin D) is also named as 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
Weigang Yuan	36183552	Biochem Biophys Res Commun	WB
Suman Rimal	34663454	Acta Neuropathol Commun	IF
Pengyun Li	34326318	Cell Death Discov	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

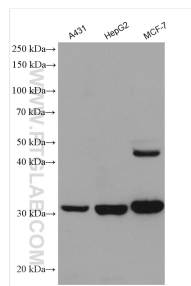
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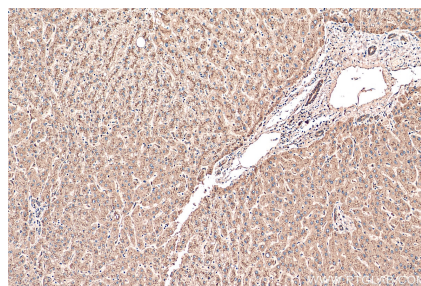
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 55021-1-AP (Cathepsin D antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 55021-1-AP (Cathepsin D antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).