

For Research Use Only

# Cathepsin L Polyclonal antibody

Catalog Number: 27952-1-AP

Featured Product

3 Publications



## Basic Information

**Catalog Number:**

27952-1-AP

**Size:**

450 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG27813

**GenBank Accession Number:**

BC012612

**GeneID (NCBI):**

1514

**UNIPROT ID:**

P07711

**Full Name:**

cathepsin L1

**Calculated MW:**

38 kDa

**Observed MW:**

36-39 kDa, 29 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IHC 1:50-1:500

## Applications

**Tested Applications:**

IHC, WB, ELISA

**Cited Applications:**

WB, IHC

**Species Specificity:**

Human, mouse

**Cited Species:**

human, mouse

**Positive Controls:**

WB : A549 cells,

IHC : human liver cancer 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

CTSL1(Cathepsin L1) is also named as CTSL and MEP, belongs to the peptidase C1 family. It is a lysosomal proteinase whose expression is also up-regulated in the skeletal muscle during starvation(PMID:20088826). It plays an intracellular role in normal intestinal epithelial polarization and initiation of neoplasia(PMID:17622569). CTSL1 also improves cardiac function and inhibits cardiac hypertrophy, inflammation, and fibrosis through blocking AKT/GSK3B signaling(PMID:19096818). The full length protein is 38 kDa with a signal peptide, two propeptide and a glycosylation site. It has been detected the 36 kDa, 39 kDa, 29 kDa and 21 kDa in rat gastrocnemius muscle. These forms of cathepsin L could either be attributed to differences in glycosylation or to partial processing of the proenzyme. (PMID:11696001)

## Notable Publications

Author	Pubmed ID	Journal	Application
Huixia Fan	35935881	Front Pharmacol	IHC
Ziyu Liu	38324960	Transl Oncol	IHC
Zi-Bo Li	36627345	Acta Pharmacol Sin	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

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

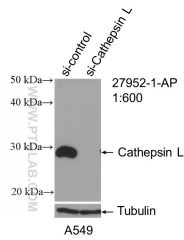
T: 4006900926

E: Proteintech-CN@ptglab.com

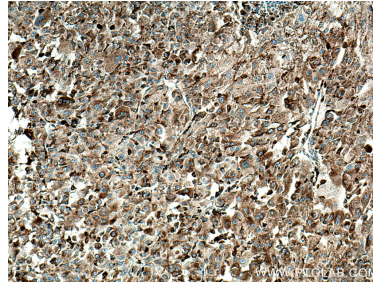
W: ptgcn.com

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

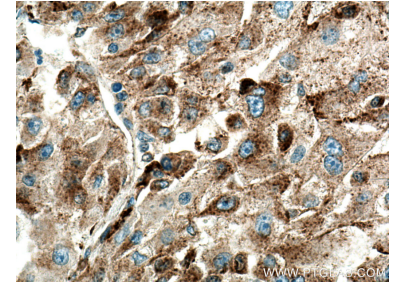
## Selected Validation Data



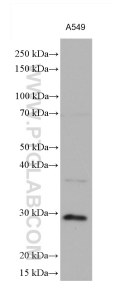
WB result of Cathepsin L antibody (27952-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cathepsin L transfected A549 cells.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 27952-1-AP (Cathepsin L 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 liver cancer tissue slide using 27952-1-AP (Cathepsin L antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



A549 cells were subjected to SDS PAGE followed by western blot with 27952-1-AP (Cathepsin L antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.