

For Research Use Only

# Cathepsin L Polyclonal antibody

Catalog Number: 27952-1-AP

Featured Product

7 Publications



## Basic Information

Catalog Number:

27952-1-AP

Concentration:

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:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

Human, mouse

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,

IHC : human liver cancer tissue,

## 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
Xueying Wang	39893643	J Cell Mol Med	WB, IHC, IF
Minghao Sui	39842473	Pharmacol 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

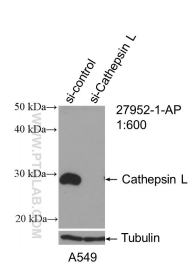
T: 4006900926

E: Proteintech-CN@ptglab.com

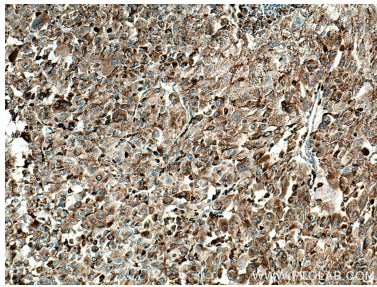
W: ptgcn.com

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

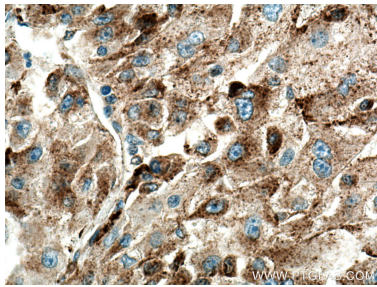
Selected Validation Data



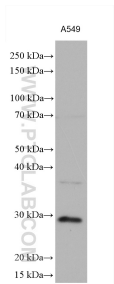
WB result of Cathepsin L antibody (27952-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cathepsin L transfected A549 cells.



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.