

For Research Use Only

# Cathepsin L Polyclonal antibody

Catalog Number: 10938-1-AP

Featured Product

10 Publications



## Basic Information

|  |   |   |
|--|---|---|
| <b>Catalog Number:</b><br>10938-1-AP       | <b>GenBank Accession Number:</b><br>BC012612                                | <b>Purification Method:</b><br>Antigen affinity purification                        |
| <b>Size:</b><br>147 µg/ml                  | <b>GeneID (NCBI):</b><br>1514   | <b>Recommended Dilutions:</b><br>WB 1:200-1:1000<br>IHC 1:50-1:500<br>IF 1:50-1:500 |
| <b>Source:</b><br>Rabbit                   | <b>UNIPROT ID:</b><br>P07711  |   |
| <b>Isotype:</b><br>IgG                     | <b>Full Name:</b><br>cathepsin L1   |   |
| <b>Immunogen Catalog Number:</b><br>AG1373 | <b>Calculated MW:</b><br>38 kDa<br><b>Observed MW:</b><br>36-39 kDa, 29 kDa |   |

## Applications

|  |  |
|--|--|
| <b>Tested Applications:</b><br>IF/ICC, IHC, WB, ELISA  | <b>Positive Controls:</b><br>WB : A549 cells,<br>IHC : human skin tissue,<br>IF : HepG2 cells, |
| <b>Cited Applications:</b><br>IF, IHC, WB  |  |
| <b>Species Specificity:</b><br>human   |  |
| <b>Cited Species:</b><br>human   |  |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |  |

## 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 |
|------------|-----------|-------------------------|-------------|
| Jana Ihlow | 34479499  | BMC Infect Dis          | IHC         |
| Peng Liu   | 31632196  | Cancer Cell Int         | WB          |
| Qiang Dong | 34807310  | J Cancer Res Clin Oncol | 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:

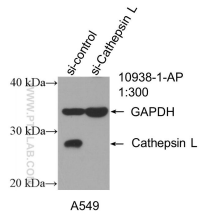
T: 4006900926

E: Proteintech-CN@ptglab.com

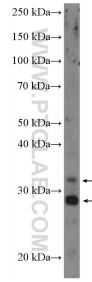
W: ptgcn.com

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

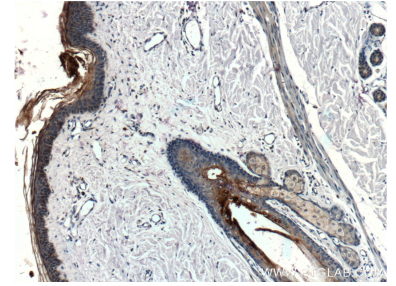
## Selected Validation Data



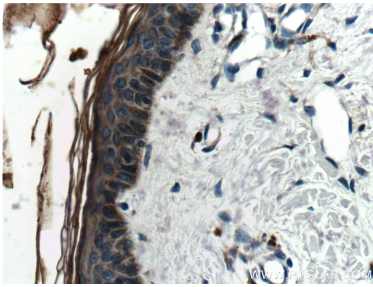
WB result of Cathepsin L antibody (10938-1-AP; 1:300; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cathepsin L transfected A549 cells.



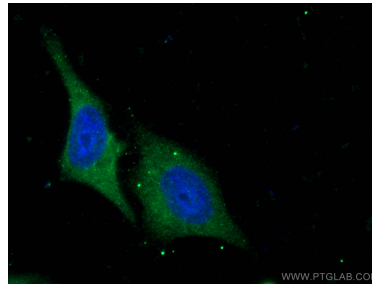
A549 cells were subjected to SDS PAGE followed by western blot with 10938-1-AP (Cathepsin L Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human skin tissue slide using 10938-1-AP (Cathepsin L Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skin tissue slide using 10938-1-AP (Cathepsin L Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10938-1-AP (Cathepsin L antibody), at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).