

For Research Use Only

# Cathepsin L Monoclonal antibody

Catalog Number: 66914-1-Ig

Featured Product

5 Publications



## Basic Information

Catalog Number:

66914-1-Ig

Concentration:

1400 ug/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG27951

GenBank Accession Number:

BC012612

GeneID (NCBI):

1514

UNIPROT ID:

P07711

Full Name:

cathepsin L1

Calculated MW:

38 kDa

Observed MW:

43 kDa

Purification Method:

Protein A purification

CloneNo.:

1A12G8

Recommended Dilutions:

WB 1:1000-1:8000

IHC 1:500-1:2000

IF/ICC 1:400-1:2000

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human

Cited Species:

human

**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, NCI-H1299 cells, HUVEC cells, HepG2 cells, HeLa cells

IHC : human prostate cancer tissue,

IF/ICC : HEK-293 cells,

## 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
Pingping Liu	36382580	Cancer Sci	WB
Lexuan Bi	39864211	Tissue Cell	IHC
Fujun Dai	39632400	Chem Biodivers	WB

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

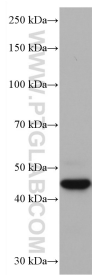
T: 4006900926

E: Proteintech-CN@ptglab.com

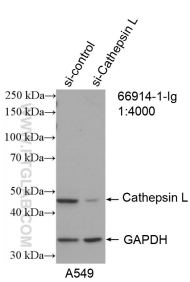
W: ptgcn.com

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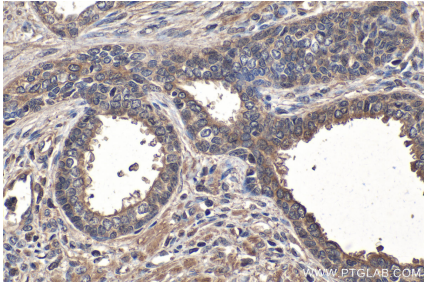
Selected Validation Data



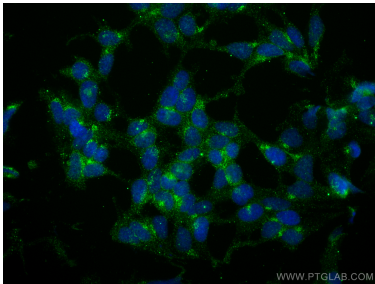
A549 cells were subjected to SDS PAGE followed by western blot with 66914-1-Ig (Cathepsin L antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



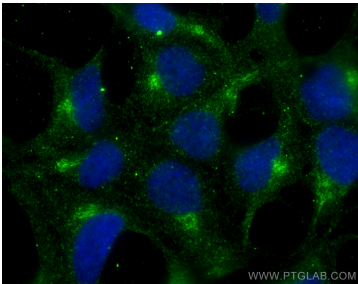
WB result of Cathepsin L antibody (66914-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cathepsin L transfected A549 cells.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 66914-1-Ig (Cathepsin L antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using Cathepsin L antibody (66914-1-Ig, Clone: 1A12G8 ) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using Cathepsin L antibody (66914-1-Ig, Clone: 1A12G8 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).