For Research Use Only

Cathepsin L Monoclonal antibody

Catalog Number:66914-1-Ig Featured Product 5 Publications

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Basic Information

Catalog Number:
66914-1-Ig

Size:
150ul , Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

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, mouse, rat

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

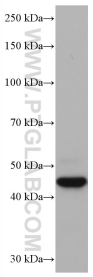
Storage

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

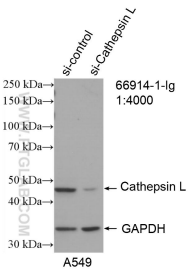
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

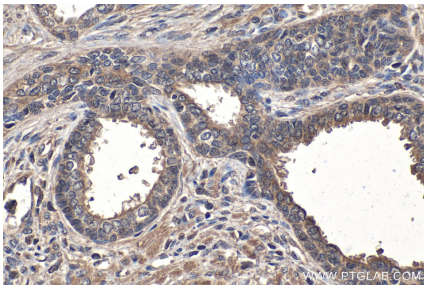
Selected Validation Data



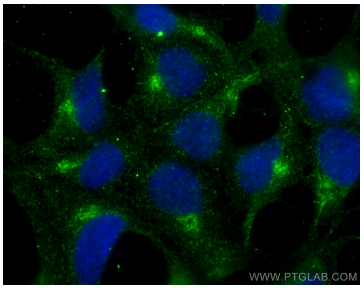
A549 cells were subjected to SDS PAGE followed by western blot with 66914-1-Ig (Cathepsin L antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



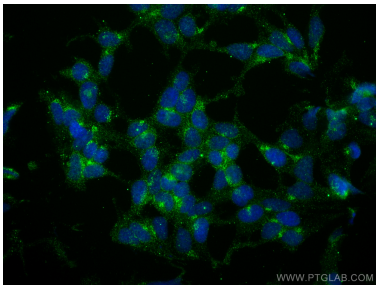
WB result of Cathepsin L antibody (66914-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cathepsin L transfected A549 cells.



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 1:800 and CoraLite®488-Conjugated 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 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).