

For Research Use Only

Cathepsin D Polyclonal antibody

Catalog Number: 31516-1-AP



Basic Information

Catalog Number: 31516-1-AP	GenBank Accession Number: NM_001909.5	Purification Method: Antigen affinity Purification
Size: 150ul , Concentration: 500 µg/ml by Nanodrop;	GeneID (NCBI): 1509	Recommended Dilutions: WB 1:1000-1:4000 IHC 1:50-1:500 IF/ICC 1:50-1:500
Source: Rabbit	UNIPROT ID: P07339	
Isotype: IgG	Full Name: cathepsin D	
	Calculated MW: 45kDa	
	Observed MW: 32 kDa, 48 kDa, 52 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
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 : A431 cells, HepG2 cells, HuH-7 cells, MCF-7 cells

IHC : human ovary cancer tissue,

IF/ICC : A431 cells, MCF-7 cells

Background Information

CTSD (cathepsin D) is a lysosomal aspartic protease in the pepsin superfamily ubiquitous to all cell types but particularly abundant in the central nervous system (CNS). The signal peptide of the pre-proCTSD (52 kDa) is cleaved in the endoplasmic reticulum (ER), forming the pro-CTSD (48 kDa), finally processed to form the mature CTSD (32 kDa) in the lysosome (PMID: 31282275,15126630). The major role of the m-CTSD is the digestion of internalized waste cell proteins and peptides in the lysosome, which maintains cell health (PMID: 32324083). CTSD is a well-established aspartyl protease that functions intracellularly in lysosomes and extracellularly in several forms of cancer.

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

*** 20ul sizes contain 0.1% BSA

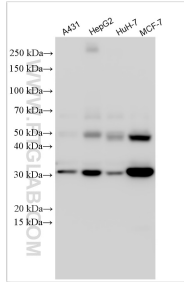
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

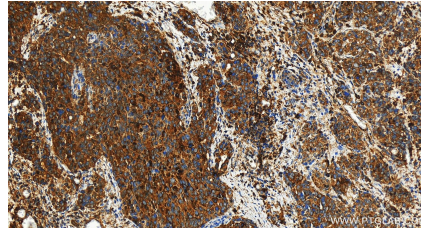
E: proteintech@ptglab.com
W: ptglab.com

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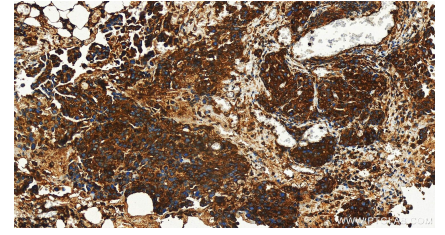
Selected Validation Data



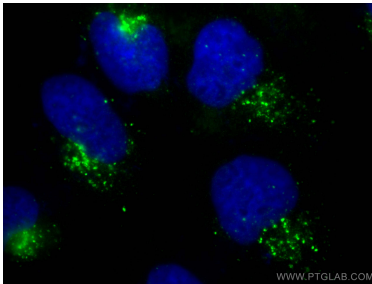
Various lysates were subjected to SDS PAGE followed by western blot with 31516-1-AP (Cathepsin D antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



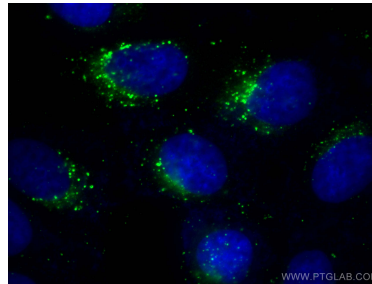
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 31516-1-AP (Cathepsin D antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using Cathepsin D antibody (31516-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using Cathepsin D antibody (31516-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).