

For Research Use Only

# Cathepsin H Polyclonal antibody

Catalog Number: 10315-1-AP **5 Publications**



## Basic Information

<b>Catalog Number:</b> 10315-1-AP	<b>GenBank Accession Number:</b> BC002479	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 500 µg/ml	<b>GeneID (NCBI):</b> 1512	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:500-1:1000 IF/ICC 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P09668	
<b>Isotype:</b> IgG	<b>Full Name:</b> cathepsin H	
<b>Immunogen Catalog Number:</b> AG0361	<b>Calculated MW:</b> 41 kDa, 28 kDa	
	<b>Observed MW:</b> 28, 41 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : A431 cells, HaCat cells, Raji cells, U-937 cells IHC : mouse lung tissue, IF/ICC : HepG2 cells,
<b>Cited Applications:</b> WB, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse, rat	
<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

Cathepsin H (CTSH, synonyms: CPSB, MGC1519, minichain) is a lysosomal cysteine proteinase important in the overall degradation of lysosomal proteins. It is composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This protein, which belongs to the peptidase C1 protein family, can act both as an aminopeptidase and as an endopeptidase. Increased expression of this gene has been correlated with malignant progression of prostate tumors. Cathepsin H is a unique member of the cysteine cathepsins that acts primarily as an aminopeptidase. Like other cysteine cathepsins, it is synthesized as an inactive precursor and activated by proteolytic removal of its propeptide. In human cells, Cathepsin H exists an autocatalytic form, proceeding from an inactive 41 kDa pro-form, through a 30 kDa intermediate form, to the 28 kDa mature form (PMID: 22704610).

## Notable Publications

Author	Pubmed ID	Journal	Application
Tomoka Hasegawa	31271212	Microscopy (Oxf)	IHC
Dali Han	30728504	Nature	FC
Wu S-M SM	21217776	Oncogene	IHC

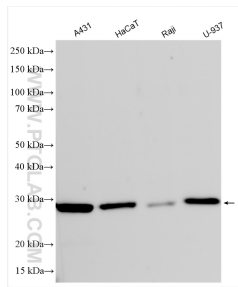
## Storage

**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

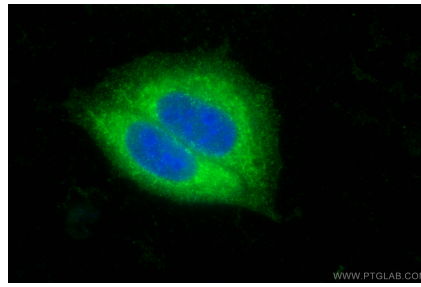
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

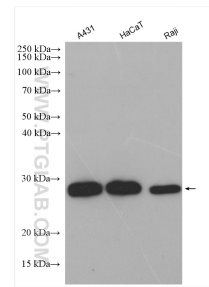
## Selected Validation Data



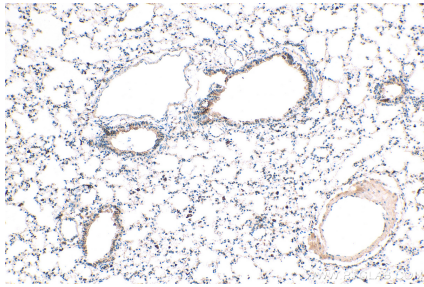
Various lysates were subjected to SDS PAGE followed by western blot with 10315-1-AP (Cathepsin H antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



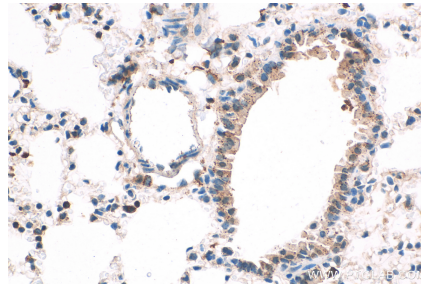
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Cathepsin H antibody (10315-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 10315-1-AP (Cathepsin H antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 10315-1-AP (Cathepsin H antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 10315-1-AP (Cathepsin H antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).