

Cathepsin L/V/K/H Rabbit mAb [0a2I]

Cat NO. :A77480

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC/IF FC	Human,Mouse,R at	P07711/O60911/P43235/ P09668	38kDa	Rabbit	IgG	50ul,100ul,200ul

Applications detail:

Application	Dilution
WB	1:1000-2000
IHC	1:100
ICC/IF	1:100
The optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Affinity-chromatography

Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human Cathepsin L/V/K/H

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

Tissue specificity:

Subcellular location:

Lysosome. Apical cell membrane,Peripheral membrane protein,Extracellular side. Cytoplasmic vesicle, secretory vesicle, chromaffin granule. Secreted, extracellular space. Secreted.

Function:

Introduction: **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

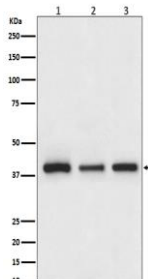
Cross Reactivity: **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine
Dg: dog **Pg:** pig **Hr:** horse

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Thiol protease important for the overall degradation of proteins in lysosomes (Probable). Plays a critical for normal cellular functions such as general protein turnover, antigen processing and bone remodeling. Involved in the solubilization of cross-linked TG/thyroglobulin and in the subsequent release of thyroid hormone thyroxine (T4) by limited proteolysis of TG/thyroglobulin in the thyroid follicle lumen (By similarity). In neuroendocrine chromaffin cells secretory vesicles, catalyzes the prohormone proenkephalin processing to the active enkephalin peptide neurotransmitter (By similarity). In thymus, regulates CD4(+) T cell positive selection by generating the major histocompatibility complex class II (MHCII) bound peptide ligands presented by cortical thymic epithelial cells. Also mediates invariant chain processing in cortical thymic epithelial cells (By similarity). Major elastin-degrading enzyme at neutral pH. Accumulates as a mature and active enzyme in the extracellular space of antigen presenting cells (APCs) to regulate degradation of the extracellular matrix in the course of inflammation (By similarity). Secreted form generates endostatin from COL18A1 (PubMed:10716919). Critical for cardiac morphology and function. Plays an important role in hair follicle morphogenesis and cycling, as well as epidermal differentiation (By similarity). Required for maximal stimulation of steroidogenesis by TIMP1 (By similarity)... [Isoform 2]: Functions in the regulation of cell cycle progression through proteolytic processing of the CUX1 transcription factor (PubMed:15099520). Translation initiation at downstream start sites allows the synthesis of isoforms that are devoid of a signal peptide and localize to the nucleus where they cleave the CUX1 transcription factor and modify its DNA binding properties (PubMed:15099520)... (Microbial infection) In cells lacking TMPRSS2 expression, facilitates human coronaviruses SARS-CoV and SARS-CoV-2 infections via a slow acid-activated route with the proteolysis of coronavirus spike (S) glycoproteins in lysosome for entry into host cell (PubMed:32142651, PubMed:32221306, PubMed:16339146, PubMed:18562523). Proteolysis within lysosomes is sufficient to activate membrane fusion by coronaviruses SARS-CoV and EMC (HCoV-EMC) S as well as Zaire ebolavirus glycoproteins (PubMed:16081529, PubMed:26953343, PubMed:18562523)..

Validation Data:

Cathepsin L/V/K/H Rabbit mAb [0a2I] Images



Western blot (SDS PAGE) analysis of extracts from (1) HepG2 cell lysate; (2) NIH/3T3 cell lysate; (3) PC-12 cell lysate;.Using Cathepsin L/V/K/H Rabbit mAb [0a2I]at dilution of 1:1000 incubated at 4°C over night.

View more information on <http://naturebios.com>

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.