

Cathepsin L Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10158**Specification**

Cathepsin L Antibody - Product Information

Application	WB, IHC
Primary Accession	P07711
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37564

Cathepsin L Antibody - Additional Information**Gene ID** 1514**Positive Control****Application & Usage**

Western Blot: Jurkat cell lysate. **IHC:** Kidney tissue
Western blotting (0.5-4 µg/ml), and **Immunohistochemistry** (5 µg/ml). However, the optimal conditions should be determined individually. Jurkat cell lysate can be used as a positive control. Detects both the proenzyme and the mature form of cathepsin L

Other Names

CTSL, CATL, CTSL1, MEP, EC 3.4.22.15

Target/Specificity

Cathepsin L

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2 mg/ml) affinity purified rabbit anti-cathepsin L polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.1% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Cathepsin L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Cathepsin L Antibody - Protein Information

Name CTSL ([HGNC:2537](#))

Synonyms CTSL1

Function

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).

Cellular Location

Lysosome {ECO:0000250|UniProtKB:P06797}. Apical cell membrane {ECO:0000250|UniProtKB:P06797}; Peripheral membrane protein {ECO:0000250|UniProtKB:P06797}; Extracellular side {ECO:0000250|UniProtKB:P06797}. Cytoplasmic vesicle, secretory vesicle, chromaffin granule {ECO:0000250|UniProtKB:P25975}. Secreted, extracellular space {ECO:0000250|UniProtKB:P06797}. Secreted {ECO:0000250|UniProtKB:P06797}. Note=Localizes to the apical membrane of thyroid epithelial cells. Released at extracellular space by activated dendritic cells and macrophages {ECO:0000250|UniProtKB:P06797}

Cathepsin L Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cathepsin L Antibody - Images

Cathepsin L Antibody - Background

Cathepsin L is a normal lysosomal cysteine endoproteases that is expressed in all cells. The latent 39 kDa pro-Cathepsin L must be processed by cleavage of the 96 amino acid pro-peptide, to generate the active two-chain form made up of 21 and 5 kDa subunits. Mature Cathepsin L is normally localized in the lysosomes where it plays a major role in intracellular protein catabolism. The fact that Cathepsin L is also capable of degrading extracellular matrix proteins suggests that it may play a role in invasion and metastasis and could be a useful prognostic indicator for cancer.