

#### Anti-Cathepsin L Antibody

Rabbit polyclonal antibody to Cathepsin L Catalog # AP61031

#### Specification

# Anti-Cathepsin L Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P07711</u> <u>P06797</u> Human, Mouse, Rat Rabbit Polyclonal 37564

## Anti-Cathepsin L Antibody - Additional Information

Gene ID 1514

**Other Names** CTSL1; Cathepsin L1; Cathepsin L; Major excreted protein; MEP

**Target/Specificity** Recognizes endogenous levels of Cathepsin L protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/50 - 1/100) IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-Cathepsin L Antibody - Protein Information

Name CTSL (<u>HGNC:2537</u>)

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:<a href="http://www.uniprot.org/citations/10716919" target="\_blank">10716919</a>). 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}

# Anti-Cathepsin L Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Cathepsin L Antibody - Images



Western blot analysis of Cathepsin L expression in C6 (A), CT26 (B), U87MG (C), A549 (D) whole cell lysates.





Immunohistochemical analysis of Cathepsin L staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

## Anti-Cathepsin L Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cathepsin L. The exact sequence is proprietary.