

Cathepsin L (Cleaved) Antibody Rabbit Polyclonal Antibody Catalog # ABV10564

Specification

Cathepsin L (Cleaved) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P07154</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 37660

Cathepsin L (Cleaved) Antibody - Additional Information

Gene ID 25697

Application & Usage

Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes the mature form of Cathepsin L (25 kDa) from human, mouse and rat origins. Reactivity to other species has not been tested. Rat kidney tissue lysate can be used as a positive control.

Other Names CTSL1 , CATL , CTSL , MEP , FLJ31037 , EC 3.4.22.15 , OTTHUMP00000063566

Target/Specificity Cathepsin L (Cleaved)

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μ g (0.5 mg/ml purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA, and 0.02% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions



Precautions

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

Cathepsin L (Cleaved) Antibody - Protein Information

Name Ctsl {ECO:0000312|RGD:2448}

Synonyms Ctsl1

Function

Thiol protease important for the overall degradation of proteins in lysosomes (By similarity). 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. 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 (By similarity). 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 (PubMed:7777858).

Cellular Location

Lysosome. 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. Note=Localizes to the apical membrane of thyroid epithelial cells. Released at extracellular space by activated dendritic cells and macrophages. {ECO:0000250|UniProtKB:P06797}

Tissue Location

Both mature cathepsin L1 and procathepsin L are found in the upper epidermis. The lower epidermis predominantly contains procathepsin L. In seminiferous tubules expression is greater at stages VI-VII than at stages IX-XII.

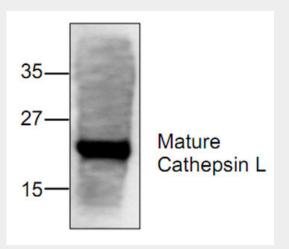
Cathepsin L (Cleaved) Antibody - Protocols

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>



Cathepsin L (Cleaved) Antibody - Images



Western blot analysis of Cathepsin L with rat kidney tissue lysate.

Cathepsin L (Cleaved) Antibody - Background

The cysteine proteases termed lysosomal cathepsins have long been tho μ ght to be primarily involved in end-stage protein breakdown within lysosomal compartments. Cathepsin L functions to regulate cell cycle progression thro μ gh proteolytic processing of the CDP/Cux transcription factor.