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CTSL / Cathepsin L Antibody
Rabbit Polyclonal Antibody
Catalog # ALS15568

Specification

CTSL / Cathepsin L Antibody - Product Information

Application	**WB**
Primary Accession	P07711
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**38kDa KDa**

CTSL / Cathepsin L Antibody - Additional Information

Gene ID 1514

Other Names
Cathepsin L1, 3.4.22.15, Cathepsin L, Major excreted protein, MEP, Cathepsin L1 heavy chain, Cathepsin L1 light chain, CTSL, CTSL1

Target/Specificity
Detects both the proenzyme and the mature form of cathepsin L

Reconstitution & Storage
Long term: -70°C; Short term: -20°C

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

CTSL / 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}

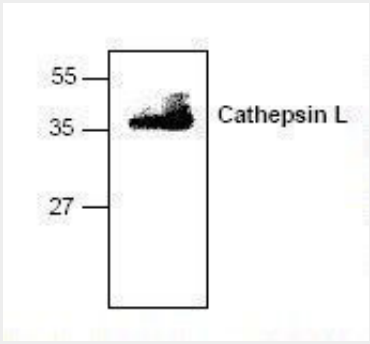
Volume
250 µl

CTSL / 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 Cytomety
- Cell Culture

CTSL / Cathepsin L Antibody - Images



Western blot of Cathepsin L antibody ALS15568.

CTSL / Cathepsin L Antibody - Background

Important for the overall degradation of proteins in lysosomes.

CTSL / Cathepsin L Antibody - References

Gal S.,et al.Biochem. J. 253:303-306(1988).
Joseph L.J.,et al.J. Clin. Invest. 81:1621-1629(1988).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Humphray S.J.,et al.Nature 429:369-374(2004).