

Cathepsin L (Cleaved) Blocking Peptide

Catalog # PBV10347b

Specification

Cathepsin L (Cleaved) Blocking Peptide - Product Information

Primary Accession P07154
Gene ID 115743
Calculated MW 37660

Cathepsin L (Cleaved) Blocking Peptide - Additional Information

Gene ID 25697

Application & Usage The peptide is used for blocking the

antibody activity of active Cathepsin L-cleaved. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at

37°C

Other Names

Cathepsin L1, 3.4.22.15, Cathepsin L, Cyclic protein 2, CP-2, Major excreted protein, MEP, Procathepsin L, Cathepsin L1 heavy chain, Cathepsin L1 light chain, Ctsl, Ctsl1

Target/Specificity

Cathepsin L (Cleaved)

Formulation

 $50 \mu g$ (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

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

Cathepsin L (Cleaved) Blocking Peptide - Protein Information

Name Ctsl {ECO:0000312|RGD:2448}

Synonyms Ctsl1

Function



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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) Blocking Peptide - Protocols

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

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

Cathepsin L (Cleaved) Blocking Peptide - Images