

Cathepsin D Blocking Peptide
Catalog # PBV10076b**Specification**

Cathepsin D Blocking Peptide - Product Information

Primary Accession	P07711
Gene ID	1514
Calculated MW	37564

Cathepsin D Blocking Peptide - 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

Cathepsin D

Formulation

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Cathepsin D Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Cathepsin D Blocking Peptide - 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 D Blocking Peptide - 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 D Blocking Peptide - Images