

**CTSL Blocking Peptide (N-Term)**  
**Synthetic peptide**  
**Catalog # BP21415a****Specification**

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**CTSL Blocking Peptide (N-Term) - Product Information**Primary Accession [P07711](#)**CTSL Blocking Peptide (N-Term) - Additional Information****Gene ID** 1514**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence is selected from aa 97-109 of HUMAN CTSL

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CTSL Blocking Peptide (N-Term) - 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:<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}

#### **CTSL Blocking Peptide (N-Term) - Protocols**

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

- [Blocking Peptides](#)

#### **CTSL Blocking Peptide (N-Term) - Images**

#### **CTSL Blocking Peptide (N-Term) - Background**

Important for the overall degradation of proteins in lysosomes.

#### **CTSL Blocking Peptide (N-Term) - 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).