

CTSL Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21415a

Specification

CTSL Antibody (N-Term) - Product Information

Application	WB,E
Primary Accession	P07711
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	37564

CTSL Antibody (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

This CTSL antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 97-129 amino acids from the human CTSL.

Dilution

WB~~1:8000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CTSL Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

CTSL Antibody (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:[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

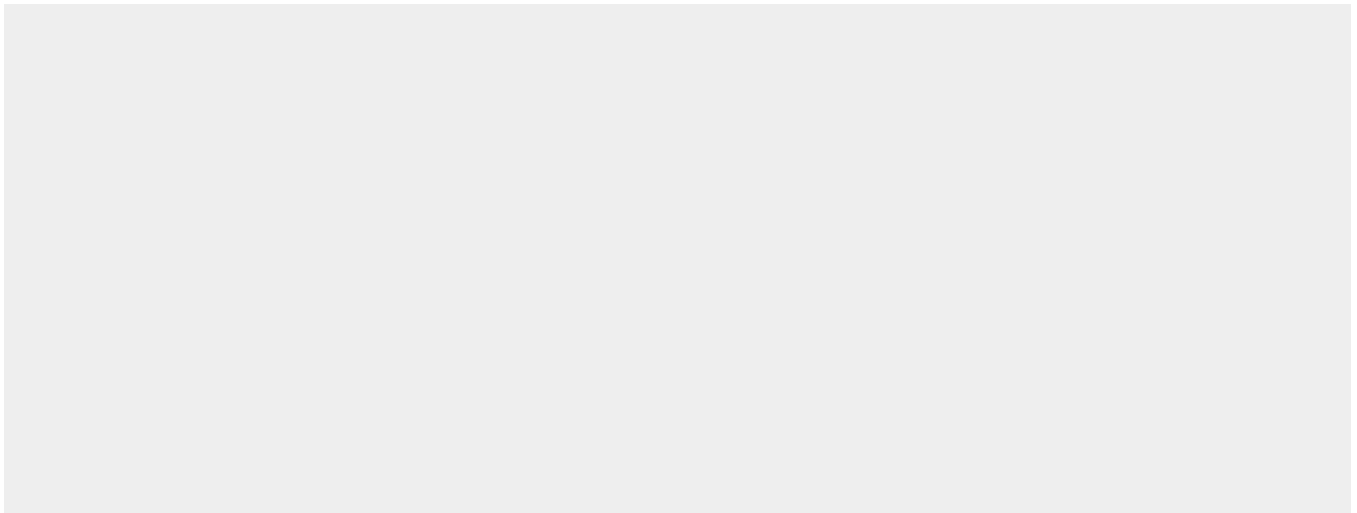
Lysosome {ECO:0000250|UniProtKB:P06797}. Apical cell membrane {ECO:0000250|UniProtKB:P06797}; Peripheral membrane protein {ECO:0000250|UniProtKB:P06797}; Extracellular side {ECO:0000250|UniProtKB:P06797}. Cytoplasmic vesicle, secretory vesicle, chromaffin granule {ECO:0000250|UniProtKB:P25975}. Secreted, 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}

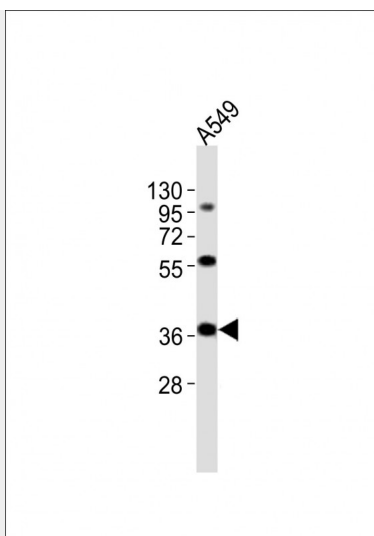
CTSL Antibody (N-Term) - Protocols

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

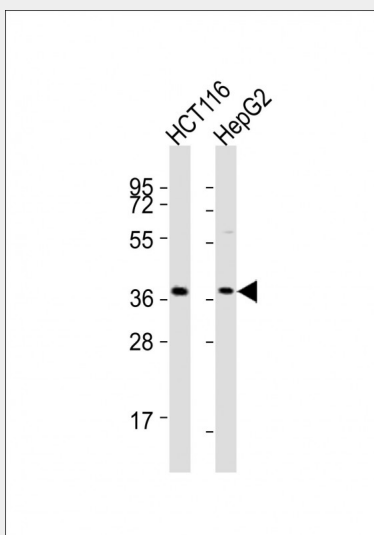
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CTSL Antibody (N-Term) - Images





Anti-CTSL Antibody (N-Term) at 1:2000 dilution + A549 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-CTSL Antibody (N-Term) at 1:8000 dilution Lane 1: HCT116 whole cell lysates Lane 2: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CTSL Antibody (N-Term) - Background

Important for the overall degradation of proteins in lysosomes.

CTSL Antibody (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).