

Mouse Ctsl1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19338B

Specification

Mouse Ctsl1 Antibody (C-term) - Product Information

| Application | WB,E |
|-------------------|--------------------|
| Primary Accession | <u>P06797</u> |
| Other Accession | <u>NP_034114.1</u> |
| Reactivity | Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 37547 |
| Antigen Region | 267-294 |
| | |

Mouse Ctsl1 Antibody (C-term) - Additional Information

Gene ID 13039

Other Names

Cathepsin L1, Cathepsin L, Major excreted protein, MEP, p39 cysteine proteinase, Cathepsin L1 heavy chain, Cathepsin L1 light chain, Ctsl, Ctsl1

Target/Specificity

This Mouse Ctsl1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 267-294 amino acids from the C-terminal region of mouse Ctsl1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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

Mouse Ctsl1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Ctsl1 Antibody (C-term) - Protein Information

Name Ctsl {ECO:0000312|MGI:MGI:88564}



Synonyms Ctsl1

Function Thiol protease important for the overall degradation of proteins in lysosomes (Probable). 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 (PubMed:<u>12782676</u>). In neuroendocrine chromaffin cells secretory vesicles, catalyzes the prohormone proenkephalin processing to the active enkephalin peptide neurotransmitter (PubMed:<u>12869695</u>). 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 (PubMed:<u>12021314</u>). Also mediates invariant chain processing in cortical thymic epithelial cells (PubMed:<u>9545226</u>). 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 (PubMed:<u>12417635</u>). Secreted form generates endostatin from COL18A1 (PubMed:<u>10716919</u>). Critical for cardiac morphology and function (PubMed:<u>11972068</u>). Plays an important role in hair follicle morphogenesis and cycling, as well as epidermal differentiation (PubMed:<u>12163394</u>). Required for maximal stimulation of steroidogenesis by TIMP1 (By similarity).

Cellular Location

Lysosome. Apical cell membrane; Peripheral membrane protein; Extracellular side. Secreted, extracellular space. Secreted Cytoplasmic vesicle, secretory vesicle, chromaffin granule {ECO:0000250|UniProtKB:P25975}. Note=Localizes to the apical membrane of thyroid epithelial cells. Released at extracellular space by activated dendritic cells and macrophages (PubMed:12417635)

Tissue Location

Expressed in thymus, kidney and liver (PubMed:9545226). Expressed in thyroid epithelial cells. Expressed in cortical thymic epithelial cells (PubMed:9545226). Expressed by antigen presenting cells (APCs) such as dendritic cells and macrophages (PubMed:11483509, PubMed:12417635).

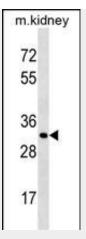
Mouse Ctsl1 Antibody (C-term) - Protocols

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

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

Mouse Ctsl1 Antibody (C-term) - Images





Mouse Ctsl1 Antibody (C-term)(Cat. #AP19338b) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the Ctsl1 antibody detected the Ctsl1 protein (arrow).

Mouse Ctsl1 Antibody (C-term) - Background

Important for the overall degradation of proteins in lysosomes.

Mouse Ctsl1 Antibody (C-term) - References

Zeeuwen, P.L., et al. FASEB J. 24(10):3744-3755(2010) Shimada, N., et al. Am. J. Pathol. 176(5):2571-2580(2010) Duewell, P., et al. Nature 464(7293):1357-1361(2010) Ceru, S., et al. J. Biol. Chem. 285(13):10078-10086(2010) Gocheva, V., et al. Genes Dev. 24(3):241-255(2010)