

Cathepsin L(heavy chain) Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54282

## **Specification**

# Cathepsin L(heavy chain) Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC-P, IHC-F, IF, ICC, E <u>P06797</u> Rat Rabbit Polyclonal 37547

### Cathepsin L(heavy chain) Polyclonal Antibody - Additional Information

Gene ID 13039

Other Names Procathepsin L, 3.4.22.15, Cathepsin L1, Major excreted protein, MEP, p39 cysteine proteinase, Cathepsin L, Cathepsin L heavy chain, Cathepsin L light chain, Ctsl {ECO:0000312|MGI:MGI:88564}, Ctsl1

Dilution <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_ICC">ICC~~N/A

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# Cathepsin L(heavy chain) Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/12782676" target="\_blank">12782676</a>). In neuroendocrine chromaffin cells secretory vesicles, catalyzes the prohormone proenkephalin



processing to the active enkephalin peptide neurotransmitter (PubMed:<a

href="http://www.uniprot.org/citations/12869695" target="\_blank">12869695</a>). 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:<a href="http://www.uniprot.org/citations/12021314" target="\_blank">12021314</a>). Also mediates invariant chain processing in cortical thymic epithelial cells (PubMed:<a href="http://www.uniprot.org/citations/9545226" target="\_blank">9545226</a>). 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:<a

href="http://www.uniprot.org/citations/12417635" target="\_blank">12417635</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/11972068" target="\_blank">11972068</a>). Plays an important role in hair follicle morphogenesis and cycling, as well as epidermal differentiation (PubMed:<a

href="http://www.uniprot.org/citations/12163394" target="\_blank">12163394</a>). 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).

# Cathepsin L(heavy chain) Polyclonal Antibody - Protocols

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

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

Cathepsin L(heavy chain) Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cathepsin L) Polyclonal Antibody, Unconjugated (bs-10523R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.