

**CTSD Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2221B**

**Specification**

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**CTSD Antibody - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P07339</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>44552</b>

**CTSD Antibody - Additional Information**

**Gene ID** 1509

**Other Names**

Cathepsin D, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

**Target/Specificity**

Purified His-tagged CTSD protein was used to produced this monoclonal antibody.

**Dilution**

WB~~1:2000

IHC-P~~1:25

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**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**

CTSD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CTSD Antibody - Protein Information**

**Name** CTSD

**Synonyms** CPSD

**Function** Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation (PubMed:[27333034](#)). Involved in the pathogenesis of several diseases such as breast cancer and

possibly Alzheimer disease.

#### Cellular Location

Lysosome. Melanosome. Secreted, extracellular space. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380)

#### Tissue Location

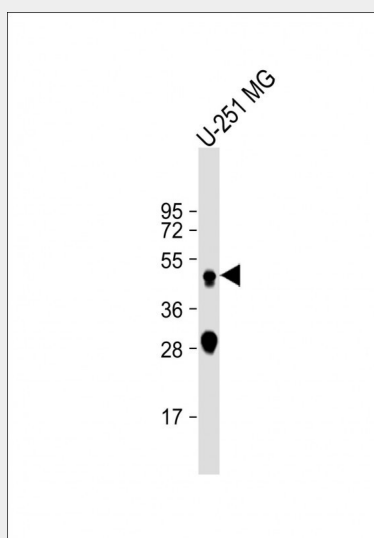
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

### CTSD Antibody - Protocols

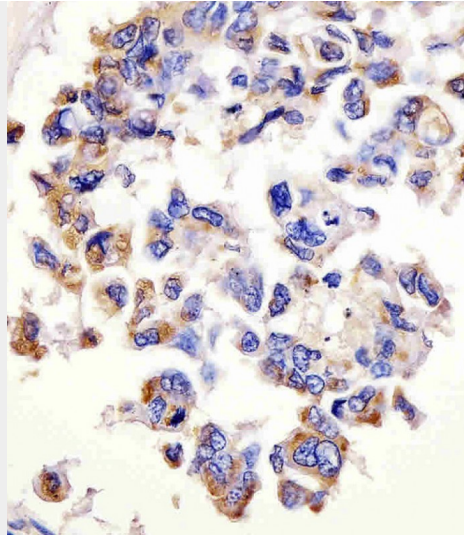
Provided below are standard protocols that you may find useful for product applications.

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

### CTSD Antibody - Images



Anti-CTSD Antibody at 1:2000 dilution + U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



AM2221b staining CTSD in human lung adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

#### **CTSD Antibody - Background**

Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

#### **CTSD Antibody - References**

Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).  
Faust P.L., et al. Proc. Natl. Acad. Sci. U.S.A. 82:4910-4914(1985).  
Westley B.R., et al. Nucleic Acids Res. 15:3773-3786(1987).  
Redecker B., et al. DNA Cell Biol. 10:423-431(1991).  
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

#### **CTSD Antibody - Citations**

- [A C-terminally truncated mouse Best3 splice variant targets and alters the ion balance in lysosome-endosome hybrids and the endoplasmic reticulum.](#)