

**CTSD Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AW5191**

**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>
Predicted	<b>Mouse, Bovine</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>H=45 KDa</b>
Isotype	<b>IgG1</b>
Antigen Source	<b>Human</b>

**CTSD Antibody - Additional Information**

**Gene ID** 1509

**Antigen Region**  
1-402

**Other Names**  
CTSD;CPSD; Cathepsin D; Cathepsin D light chain; Cathepsin D heavy chain

**Dilution**  
WB~~1:1000  
IHC-P~~1:25

**Target/Specificity**  
Purified His-tagged CTSD protein was used to produced this monoclonal antibody.

**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:<a href="http://www.uniprot.org/citations/27333034" target="\_blank">27333034</a>). 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

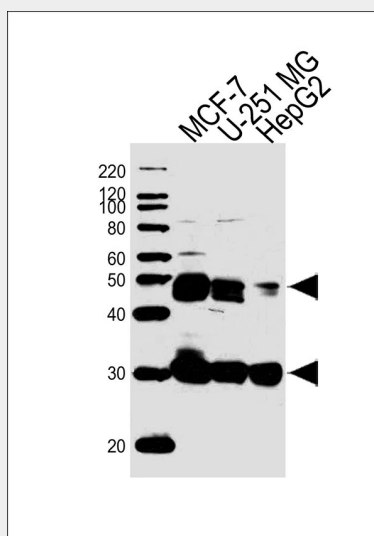
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

## CTSD Antibody - Protocols

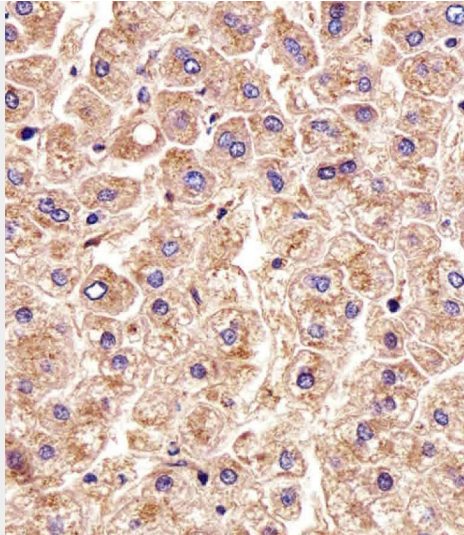
Provided below are standard protocols that you may find useful for product applications.

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

## CTSD Antibody - Images



Western blot analysis of lysates from MCF-7, U-251 MG, HepG2 cell line (from left to right), using CTSD Antibody (Cat. #AW5191). AW5191 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.



Immunohistochemical analysis of paraffin-embedded H. liver section using CTSD Antibody(Cat#AW5191). AW5191 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

#### **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.