

**CTSD Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5009**

**Specification**

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**CTSD Antibody - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">P07339</a>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	44552 Da
Isotype	Rabbit IgG
Antigen Source	HUMAN

**CTSD Antibody - Additional Information**

**Gene ID** 1509

**Other Names**

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

**Dilution**

IF~~1:25

WB~~1:1000

IHC-P~~1:25

**Target/Specificity**

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.

**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**

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

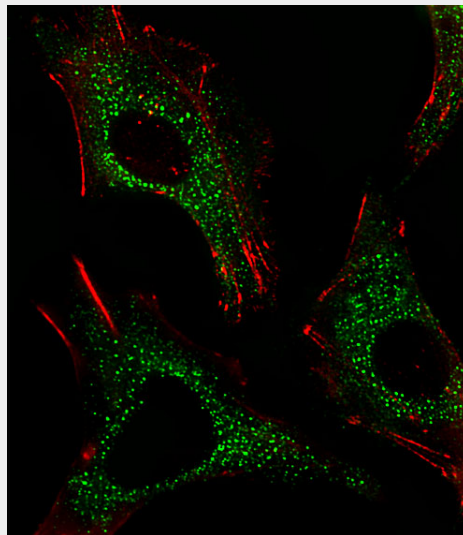
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

## CTSD Antibody - Protocols

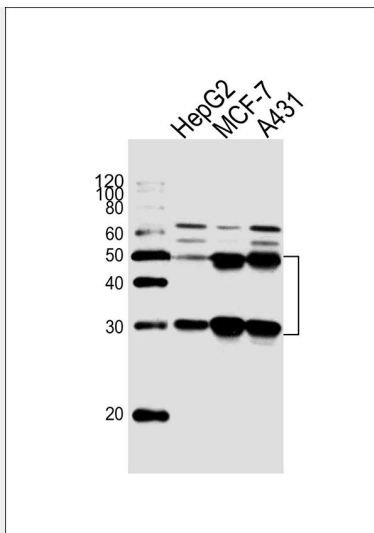
Provided below are standard protocols that you may find useful for product applications.

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

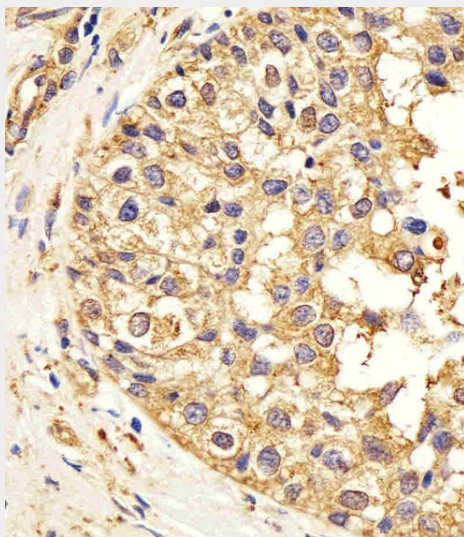
## CTSD Antibody - Images



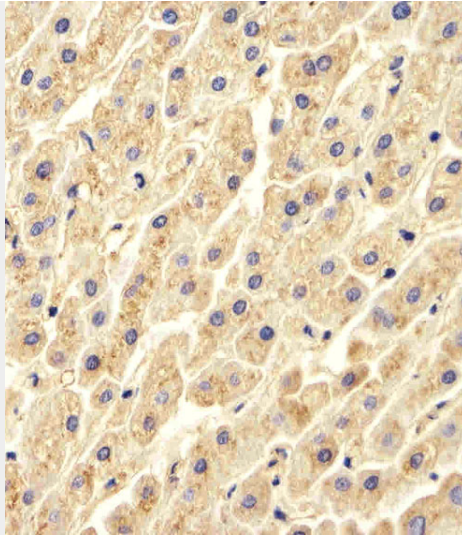
Fluorescent image of HepG2 cells stained with CTSD(Cat#AW5009). AW5009 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from HepG2, MCF-7, A431 cell line (from left to right), using CTSD Antibody (Cat. #AW5009). AW5009 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H. breast carcinoma section using CTSD (Cat#AW5009). AW5009 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H.liver section using CTSD(Cat#AW5009). AW5009 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, 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**

- 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.
- Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.