

**CTSD Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20675b****Specification**

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**CTSD Antibody - Product Information**

Application	WB, IF, IHC-P-Leica,E
Primary Accession	<a href="#">P07339</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-412

**CTSD Antibody - Additional Information****Gene ID** 1509**Other Names**

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

**Target/Specificity**

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

**Dilution**

WB~~1:1000

IF~~1:25

IHC-P-Leica~~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**

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**

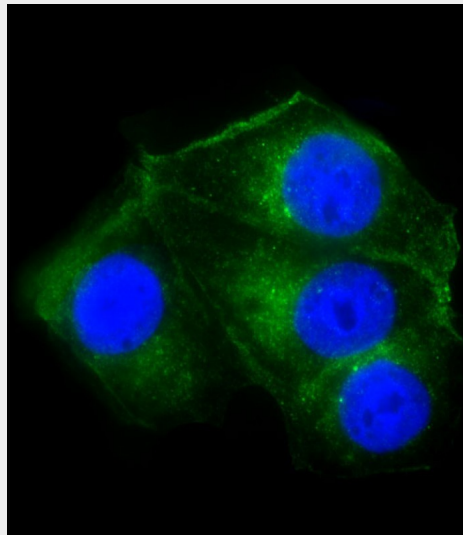
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

### **CTSD Antibody - Protocols**

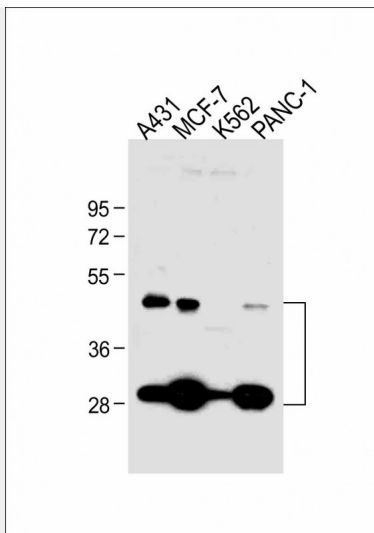
Provided below are standard protocols that you may find useful for product applications.

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

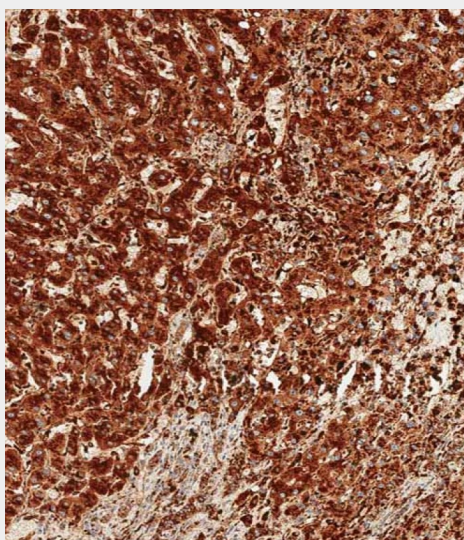
### **CTSD Antibody - Images**



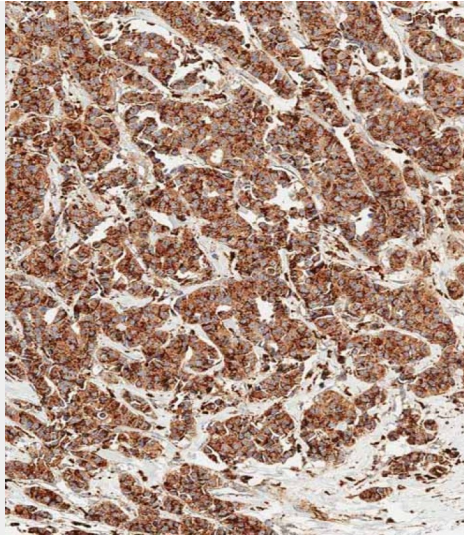
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF-7 cells labeling CTSD with AP20675b at 1/25 dilution, followed by DyLight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on MCF-7 cell line. Cytoplasmic actin is detected with DyLight® 554 Phalloidin (1186255) at 1/500 dilution (red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-CTSD Antibody at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: K562 whole cell lysate Lane 4: PANC-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



Immunohistochemical analysis of paraffin-embedded human liver tissue using AP20675b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody(1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AP20675b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer 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**

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.  
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