

#### **CTSD Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5009

### **Specification**

# **CTSD Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Isotype

IF, IHC-P, WB,E
P07339
Human
Rabbit
polyclonal
44552 Da
Rabbit IgG
HUMAN

### **CTSD Antibody - Additional Information**

#### **Gene ID 1509**

**Antigen Source** 

#### **Other Names**

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

# **Dilution**

IF~~1:25 IHC-P~~1:25 WB~~1:1000

#### **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.

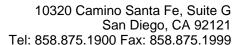
# **Precautions**

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**

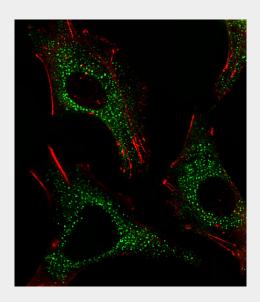
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

# **CTSD Antibody - Protocols**

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

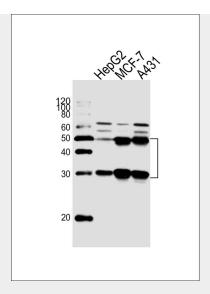
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# CTSD Antibody - Images

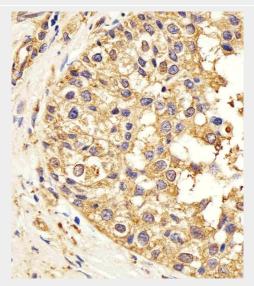


Fluorescent image of HepG2 cells stained with CTSD(Cat#AW5009). AW5009 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



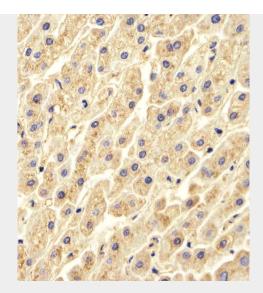


Western blot analysis of lysates from HepG2, MCF-7, A431 cell line (from left to right), using CTSD Antibody(Cat. #AW5009). AW5009 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



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.