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# CTSD Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5009

## Product Information

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| **Application** | IF, IHC-P, WB |
| **Primary Accession** | P07339 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Calculated MW** | 44552 |
| **Isotype** | Rabbit IgG |
| **Antigen Source** | HUMAN |

## Additional Information

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| **Gene ID** | 1509 |
| **Other Names** | Cathepsin D, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD |
| **Dilution** | IF~~1:25 IHC-P~~1:100~500 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. |

## Protein Information

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| **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. |

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| **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). |

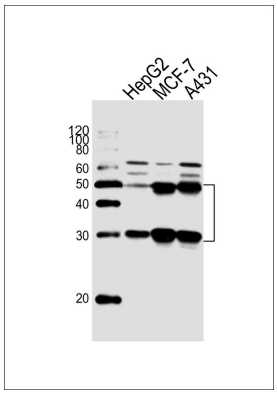
## Background

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

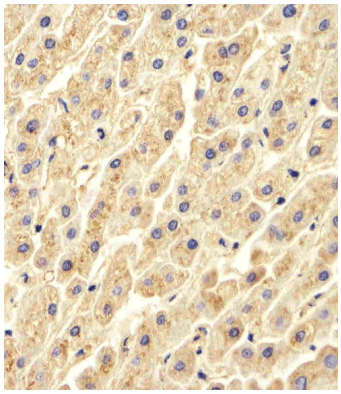
## References


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.


## Images

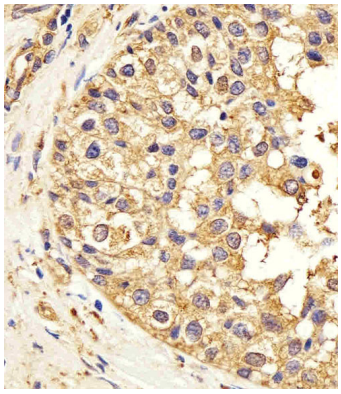


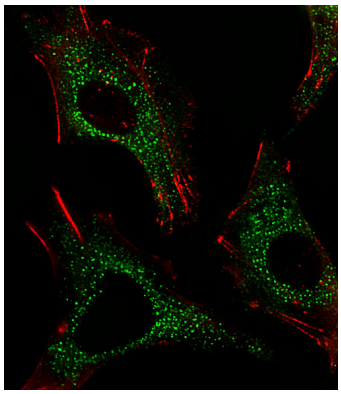

Western blot analysis of lysates from HepG2, MCF-7, A431 cell line (from left to right), using CTSD Antibody(Cat. #AW5009). AW5009 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H.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.

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.





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 lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).