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CTSD Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5009

Product Information

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

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

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).

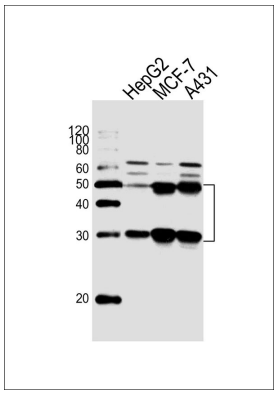
Background

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

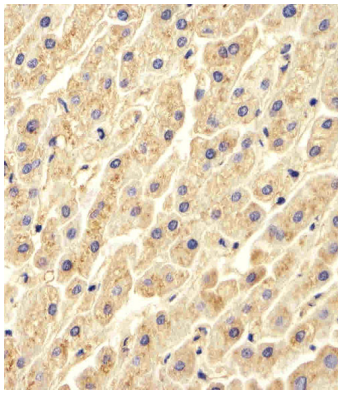
References

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

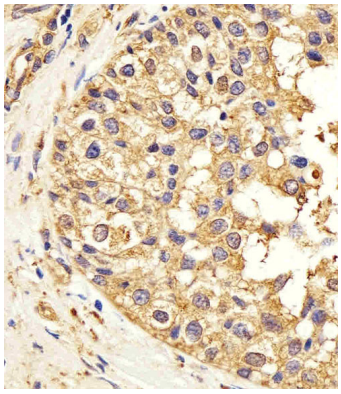


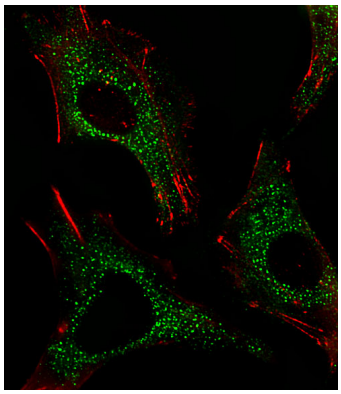
Western blot analysis of lysates from HepG2, MCF-7, A431 cell line (from left to right), using CTSD Antibody(Cat. #AW5009). AW5009 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



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).