

CTSD Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20675b

Specification

CTSD Antibody - Product Information

Application IF, WB, IHC-P-Leica, E
Primary Accession P07339
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

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

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

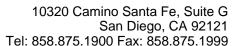
CTSD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

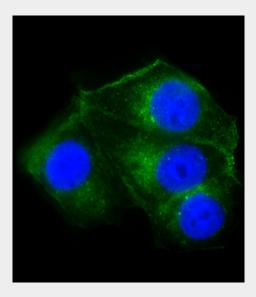
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

CTSD Antibody - Protocols

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

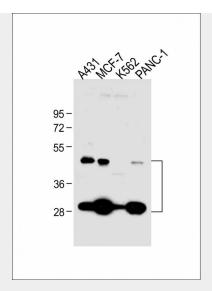
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CTSD Antibody - Images

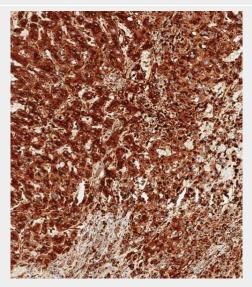


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized MCF-7 cells labeling CTSD with AP20675b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm 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).



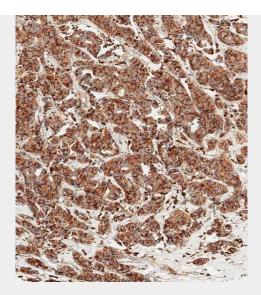


All lanes : Anti-CTSD Antibody at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: K562 whole cell lysate Lane 4: PANC-1 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted 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. Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.