

CTSD Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2221B

Specification

CTSD Antibody - Product Information

Application	WB, IHC-P,E
Primary Accession	P07339
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	44552

CTSD Antibody - Additional Information

Gene ID 1509

Other Names

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

Target/Specificity

Purified His-tagged CTSD protein was used to produced this monoclonal antibody.

Dilution

WB~~1:2000

IHC-P~~1:25

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

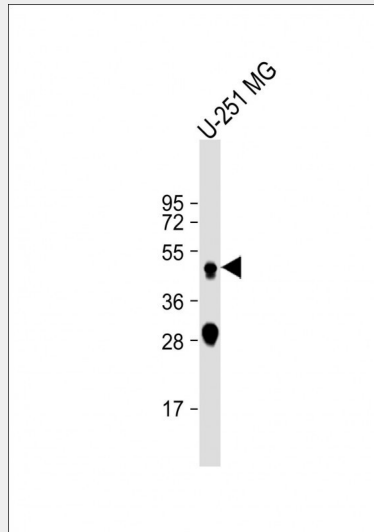
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

CTSD Antibody - Protocols

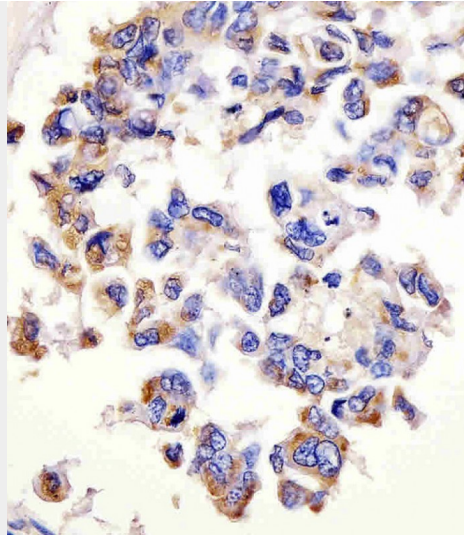
Provided below are standard protocols that you may find useful for product applications.

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

CTSD Antibody - Images



Anti-CTSD Antibody at 1:2000 dilution + U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



AM2221b staining CTSD in human lung adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent 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

Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).
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.

CTSD Antibody - Citations

- [A C-terminally truncated mouse Best3 splice variant targets and alters the ion balance in lysosome-endosome hybrids and the endoplasmic reticulum.](#)