

CTSD Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2221b

Product Information

Application	WB, IHC-P, E
Primary Accession	P07339
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	892CT11.1.1
Calculated MW	44552

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~~1:100~500 E~~Use at an assay dependent concentration.
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.

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).

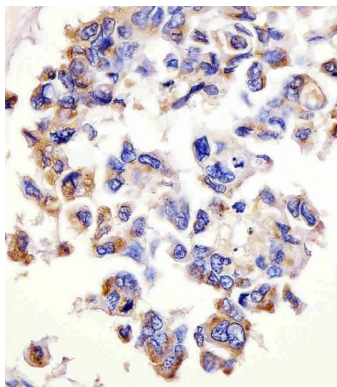
Background

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

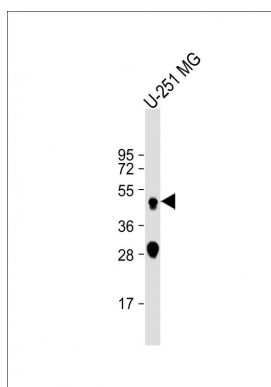
References

- 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.

Images



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 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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% NFDM/TBST.

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.