

CTSD Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9447b

Specification

CTSD Antibody (C-term) - Product Information

Application Primary Accession Reactivity	WB,E <u>P07339</u> Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44552
Antigen Region	377-408

CTSD Antibody (C-term) - Additional Information

Gene ID 1509

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

Target/Specificity

This CTSD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 377-408 amino acids from the C-terminal region of human CTSD.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CTSD Antibody (C-term) - 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

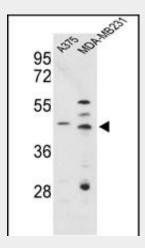
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

CTSD Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CTSD Antibody (C-term) - Images



Western blot analysis of CTSD Antibody (C-term) (Cat. #AP9447b) in A375, MDA-MB231 cell line lysates (35ug/lane). CTSD (arrow) was detected using the purified Pab.

CTSD Antibody (C-term) - Background

CTSD encodes a lysosomal aspartyl protease composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This proteinase, which is a member of the peptidase C1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of this gene is initiated from several sites, including one which is a start site for an estrogen-regulated transcript.



CTSD Antibody (C-term) - References

Christensen, B., et al. J. Biol. Chem. 285(11):7929-7937(2010) Albayrak, O., et al. J. Gerontol. A Biol. Sci. Med. Sci. 65(3):219-224(2010) Heinrich, M., et al. EMBO J. 18(19):5252-5263(1999)