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CTSE Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6568c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P14091
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19246
Calculated MW	42794
Antigen Region	157-187

Additional Information

Gene ID	1510
Other Names	Cathepsin E, Cathepsin E form I, Cathepsin E form II, CTSE
Target/Specificity	This CTSE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-187 amino acids from the Central region of human CTSE.
Dilution	WB~~1：500-1：2000 IHC-P~~1:100~500 FC~~1:10~50 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	CTSE Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CTSE
Function	May have a role in immune function. Probably involved in the processing of antigenic peptides during MHC class II-mediated antigen presentation. May play a role in activation-induced lymphocyte depletion in the thymus, and in neuronal degeneration and glial cell activation in the brain.

Cellular Location	Endosome. Note=The proenzyme is localized to the endoplasmic reticulum and Golgi apparatus, while the mature enzyme is localized to the endosome
Tissue Location	Expressed abundantly in the stomach, the Clara cells of the lung and activated B-lymphocytes, and at lower levels in lymph nodes, skin and spleen. Not expressed in resting B-lymphocytes

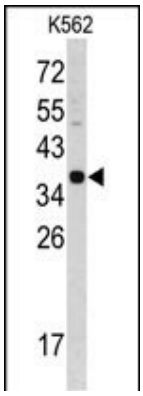
Background

CTSE is a gastric aspartyl protease that functions as a disulfide-linked homodimer. This protease, which is a member of the peptidase C1 family, has a specificity similar to that of pepsin A and cathepsin D. It is an intracellular proteinase that does not appear to be involved in the digestion of dietary protein and is found in highest concentration in the surface of epithelial mucus-producing cells of the stomach. It is the first aspartic proteinase expressed in the fetal stomach and is found in more than half of gastric cancers. It appears, therefore, to be an oncofetal antigen.

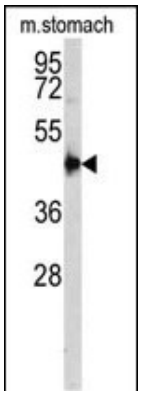
References

Caruso,M., Virchows Arch. 454 (3), 291-302 (2009)
Burster,T., Biochem. Biophys. Res. Commun. 377 (4), 1299-1303 (2008)

Images

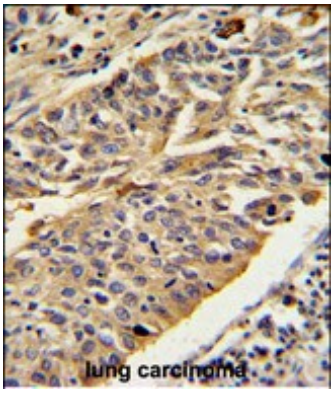


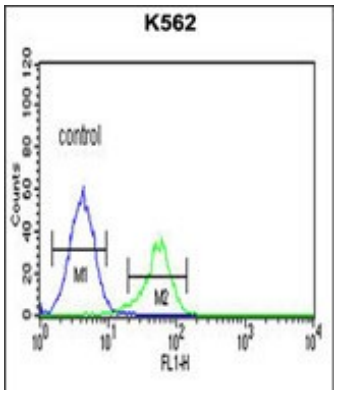
Western blot analysis of CTSE antibody (Center)(Cat. #AP6568c) in K562 cell line lysates (35ug/lane).CTSE(arrow) was detected using the purified Pab.



Western blot analysis of CTSE antibody (Center)(Cat. #AP6568c) in mouse stomach tissue lysates (35ug/lane).CTSE(arrow) was detected using the purified Pab.

CTSE Antibody (Center) (Cat. #AP6568c) IHC analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CTSE Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.





CTSE Antibody (Center) (Cat. #AP6568c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.