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CTSK Antibody (Center E112)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12885c

Specification

CTSK Antibody (Center E112) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P43235
Other Accession	P61276, Q5E968, NP_000387.1
Reactivity	**Human**
Predicted	**Bovine, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**36966**
Antigen Region	**97-126**

CTSK Antibody (Center E112) - Additional Information

Gene ID 1513

Other Names
Cathepsin K, Cathepsin O, Cathepsin O2, Cathepsin X, CTSK, CTSO, CTSO2

Target/Specificity
This CTSK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 97-126 amino acids from the Central region of human CTSK.

Dilution
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

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
CTSK Antibody (Center E112) is for research use only and not for use in diagnostic or therapeutic procedures.

CTSK Antibody (Center E112) - Protein Information

Name CTSK

Synonyms CTSO, CTSO2

Function Thiol protease involved in osteoclastic bone resorption and may participate partially in the disorder of bone remodeling. Displays potent endoprotease activity against fibrinogen at acid pH. May play an important role in extracellular matrix degradation. Involved in the release of thyroid hormone thyroxine (T4) by limited proteolysis of TG/thyroglobulin in the thyroid follicle lumen (PubMed:11082042).

Cellular Location
Lysosome. Secreted. Apical cell membrane; Peripheral membrane protein; Extracellular side. Note=Localizes to the lumen of thyroid follicles and to the apical membrane of thyroid epithelial cells

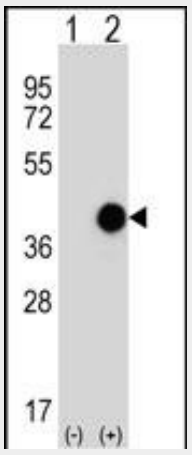
Tissue Location
Predominantly expressed in osteoclasts (bones) (PubMed:7805878). Expressed in thyroid epithelial cells (PubMed:11082042).

CTSK Antibody (Center E112) - 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

CTSK Antibody (Center E112) - Images



Western blot analysis of CTSK (arrow) using rabbit polyclonal CTSK Antibody (Center E112) (Cat. #AP12885c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CTSK gene.

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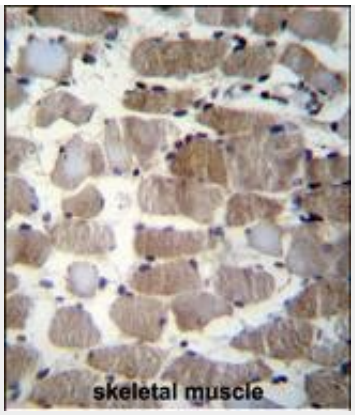
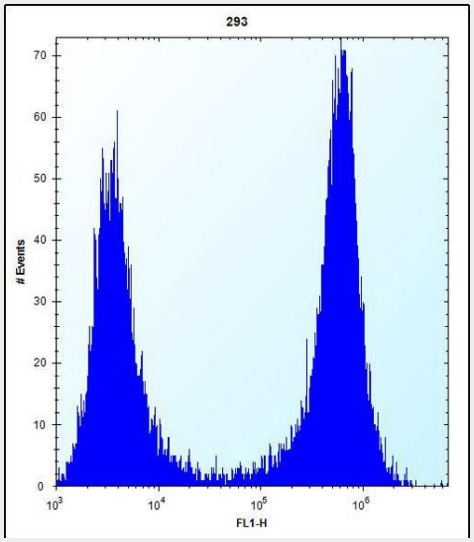


CTSK Antibody (Center E112) (Cat. #AP12885c)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CTSK Antibody (Center E112) for immunohistochemistry. Clinical relevance has not been evaluated.



CTSK Antibody (Center E112) (Cat. #AP12885c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CTSK Antibody (Center E112) - Background

The protein encoded by this gene is a lysosomal cysteine proteinase involved in bone remodeling and resorption. This protein, which is a member of the peptidase C1 protein family, is predominantly expressed in osteoclasts. However, the encoded protein is also expressed in a significant fraction of human breast cancers, where it could contribute to tumor invasiveness. Mutations in this gene are the cause of pycnodysostosis, an autosomal recessive disease characterized by osteosclerosis and short stature. This gene may be subject to RNA editing. [provided by RefSeq].

CTSK Antibody (Center E112) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Novinec, M., et al. Biochem. J. 429(2):379-389(2010)

Khan, B., et al. J. Investig. Med. 58(5):720-724(2010)
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