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Cathepsin K Rabbit pAb

Catalog # AP99525

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P43235
Other Accession	P43235
Reactivity	Mouse
Predicted	Rat, Pig, Human, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36966
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Cathepsin K
Epitope Specificity	112-210/329
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase C1 family.
SUBUNIT	Belongs to the peptidase C1 family.
DISEASE	Defects in CTSK are the cause of pycnodysostosis (PKND) [MIM:265800]. PKND is an autosomal recessive osteochondrodysplasia characterized by osteosclerosis and short stature.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, Jul 2008].

Additional Information

Gene ID	1513
Other Names	CTS02; CTSO; CTSO1; CTSO2; PKND; PYCD; MMS10-Q; Ms10q; catK; CATK_HUMAN; CTSK; Cathepsin O; Cathepsin O2; Cathepsin X; 3.4.22.38; CATK_MOUSE; CATK_RAT; cathepsin K; cathepsin K (pycnodysostosis)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

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