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# CATK Recombinant Rabbit mAb

Catalog # AP99569

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF, E |
| **Primary Accession** | P43235 |
| **Other Accession** | P43235 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Recombinant |
| **Calculated MW** | 36966 |
| **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. |
| **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

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| **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** | IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000 |
| **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

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| **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). |

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