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Procathepsin K Antibody
Purified Rabbit Polyclonal Antibody
Catalog # ABV11627

Specification

Procathepsin K Antibody - Product Information

Application	**WB**
Primary Accession	P43235
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**36966**

Procathepsin K Antibody - Additional Information

Gene ID 1513

Other Names
CTSK, CTSO, CTSO3

Target/Specificity
Procathepsin K

Formulation
100 µg (0.5 mg/ml) of antibody in PBS pH 7.2 containing 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol.

Handling
The antibody solution should be gently mixed before use.

Background Descriptions

Precautions
Procathepsin K Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Procathepsin K Antibody - 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

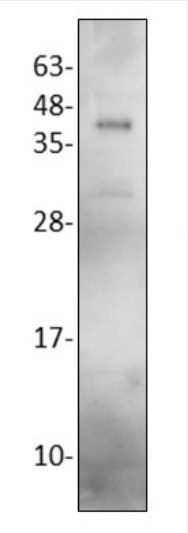
Tissue Location
Predominantly expressed in osteoclasts (bones) (PubMed:7805878). Expressed in thyroid epithelial cells (PubMed:11082042).

Procathepsin K Antibody - 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

Procathepsin K Antibody - Images



Western blot with Procathepsin K antibody. Lane1: Procathepsin K(19-329 aa) 50ng.

Procathepsin K Antibody - Background

Cathepsin K, a member of the papain cysteine proteinase family is the predominant proteinase responsible for the resorption of the bone matrix. Cathepsin cleaves proteins such as collagen type I, collagen type II and osteonectin, thereby playing a role in bone remodeling and resorption in osteoporosis, osteolytic bone metastasis and rheumatoid arthritis (Bromme and Okamoto, 1995; Drake, F. et al 1996; Bossard et al, 1996). Cathepsin K is synthesized as an inactive proenzyme (35.1 kDa) that is converted to its mature active form (23.6 kDa) by proteolytic cleavage of its

99-amino-acid propeptide domain. The in-vitro processing of procathepsin K to mature cathepsin K is autocatalytic.