10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Procathepsin B Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11230

Specification

Procathepsin B Antibody - Product Information

Application	**WB**
Primary Accession	P07858
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**37822**

Procathepsin B Antibody - Additional Information

Gene ID 1508

Positive Control	**Western Blot: Jurkat cell lysate, 3T3 cell lysate, rat kidney lysate, recombinant protein**
Application & Usage	**Western blot: 1-4 µg**

Other Names
CTSB, CPSB

Target/Specificity
Procathepsin B

Antibody Form
Liquid

Appearance
Colorless liquid

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.

Reconstitution & Storage
-20 °C

Background Descriptions

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

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Procathepsin B Antibody - Protein Information

Name CTSB

Synonyms CPSB

Function
Thiol protease which is believed to participate in intracellular degradation and turnover of proteins (PubMed:12220505). Cleaves matrix extracellular phosphoglycoprotein MEPE (PubMed:12220505). Involved in the solubilization of cross-linked TG/thyroglobulin in the thyroid follicle lumen (By similarity). Has also been implicated in tumor invasion and metastasis (PubMed:3972105).

Cellular Location
Lysosome. Melanosome. Secreted, extracellular space {ECO:0000250|UniProtKB:A1E295}. Apical cell membrane {ECO:0000250|UniProtKB:P10605}; Peripheral membrane protein {ECO:0000250|UniProtKB:P10605}; Extracellular side {ECO:0000250|UniProtKB:P10605}. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Localizes to the lumen of thyroid follicles and to the apical membrane of thyroid epithelial cells (By similarity) {ECO:0000250|UniProtKB:P10605, ECO:0000269|PubMed:17081065}

Tissue Location
Expressed in the stratum spinosum of the epidermis. Weak expression is detected in the stratum granulosum

Procathepsin B 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 B Antibody - Images

Procathepsin B Antibody - Background

Cathepsin B is a normal lysosomal cysteine proteinase that is expressed in all cells. It is synthesized as an inactive 43 kDa pro-enzyme which, by removal of a 62 amino acid propeptide, is activated to the single-chain form of 31 kDa or the two-chain form (25 and 5 kDa subunits). Matured cathepsin B is normally localized in the lysosomes where it functions in protein turnover. Cathepsin B is also shown capable of degrading extracellular matrix proteins. Elevated levels of cathepsin B correlate with malignancy suggesting that this enzyme may be a useful prognostic marker for several types of human cancers.