

**Procathepsin B Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11230****Specification**

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**Procathepsin B Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P07858</a>
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.

## 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:<a href="http://www.uniprot.org/citations/12220505" target="\_blank">12220505</a>). Cleaves matrix extracellular phosphoglycoprotein MEPE (PubMed:<a href="http://www.uniprot.org/citations/12220505" target="\_blank">12220505</a>). 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:<a href="http://www.uniprot.org/citations/3972105" target="\_blank">3972105</a>).

### 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 Cytometry](#)
- [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.