

Cathepsin B Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10156**Specification**

Cathepsin B Antibody - Product Information

Application	WB, IHC, FC
Primary Accession	P07858
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37822

Cathepsin B Antibody - Additional Information**Gene ID** 1508

Application & Usage	Western blotting (0.5-4 µg/ml) and in Immunohistochemistry (10-20 µg/ml). However, the optimal conditions should be determined individually. The purified antibody detects both the proform (37-43 kDa) and the mature form (25 kDa) of cathepsin B. It reacts with human and mouse and in a lesser extent with rat samples.
---------------------	--

Other Names

CTSB, CPSB, APPS, EC 3.4.22.1

Target/Specificity

Cathepsin B

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2 mg/ml) affinity purified rabbit anti-cathepsin B polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

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

Cathepsin 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

Cathepsin 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](#)

Cathepsin B Antibody - Images

Cathepsin 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.