

**Cathepsin D Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10157****Specification**

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**Cathepsin D Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P18242</a>
Other Accession	<a href="#">EDL18143</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44954

**Cathepsin D Antibody - Additional Information****Gene ID** 13033**Application & Usage**

Western blot analysis (0.5-4 µg/ml) and in immunoprecipitation. However, the optimal conditions should be determined individually. The purified antibody detects both the 52 kDa proform and the 34 kDa cleaved fragment of Cathepsin D.

**Other Names**

CTSD , CLN10, CPSD, MGC2311

**Target/Specificity**

Cathepsin D

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

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

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

**Precautions**

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

**Cathepsin D Antibody - Protein Information**

**Name** CtSD

**Function**

Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation.

**Cellular Location**

Lysosome. Melanosome. Secreted, extracellular space

**Cathepsin D 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 D Antibody - Images****Cathepsin D Antibody - Background**

Cathepsin D is a normal lysosomal protease that is expressed in all cells. It is an aspartyl protease with a pH optimum in the range of 3-5, and contains two N-linked oligosaccharides. Cathepsin D is synthesized as an inactive 52 kDa pro-enzyme. Activation involves the proteolytic removal of the 43 amino acid profragment and an internal cleavage to generate the two-chain form made up of 34 and 14 kDa subunits. Cathepsin D contains the mannose-6-phosphate lysosomal localization signal that targets the enzyme to the lysosomal compartment where it functions in the normal degradation of proteins. In certain tumor cells, Cathepsin D is abnormally processed and is secreted in its 52 kDa precursor form. Numerous clinical studies as well as in vitro evidence suggest that cathepsin D plays an important role in malignant transformation and may be a useful prognostic indicator for breast cancer.