



# Cathepsin D Polyclonal Antibody

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| Catalog No         | BYab-02529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Reactivity         | Human;Rat;Mouse;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Applications       | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gene Name          | CTSD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Protein Name       | Cathepsin D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Immunogen          | The antiserum was produced against synthesized peptide derived from human Cathepsin D. AA range:296-345                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Specificity        | Cathepsin D Polyclonal Antibody detects endogenous levels of Cathepsin D protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Formulation        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Source             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Purification       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dilution           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Purity             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Storage Stability  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Synonyms           | CTSD; CPSD; Cathepsin D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Observed Band      | 46,30kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cell Pathway       | Lysosome. Melanosome. Secreted, extracellular space. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380). .                                                                                                                                                                                                                                                                                                                                                                                                          |
| Tissue Specificity | Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Function           | catalytic activity:Specificity similar to, but narrower than, that of pepsin A. Does not cleave the 4-Gln- -His-5 bond in B chain of insulin.,disease:Defects in CTSD are the cause of neuronal ceroid lipofuscinosis 10 (CLN10) [MIM:610127]; also known as neuronal ceroid lipofuscinosis due to cathepsin D deficiency. The neuronal ceroid lipofuscinosis are a group of progressive neurodegenerative diseases in children and in adults, characterized by visual and mental decline, motor disturbance, epilepsy and behavioral changes.,function:Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several |

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diseases such as breast cancer and possibly Alzheimer disease.,polymorphism:The Val-58 allele is significantly overrepresented in demented patients (11.8%) compared with non-demented controls (4.9%). Carriers of the Val-58 allele have a 3.1-fold increased risk for de

**Background**

This gene encodes a member of the A1 family of peptidases. The encoded preproprotein is proteolytically processed to generate multiple protein products. These products include the cathepsin D light and heavy chains, which heterodimerize to form the mature enzyme. This enzyme exhibits pepsin-like activity and plays a role in protein turnover and in the proteolytic activation of hormones and growth factors. Mutations in this gene play a causal role in neuronal ceroid lipofuscinosis-10 and may be involved in the pathogenesis of several other diseases, including breast cancer and possibly Alzheimer's disease. [provided by RefSeq, Nov 2015],

**matters needing attention**

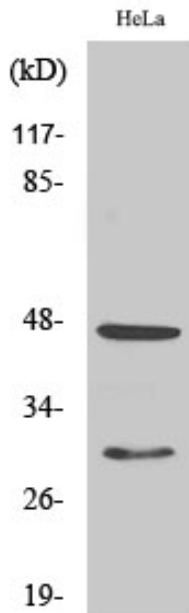
Avoid repeated freezing and thawing!

**Usage suggestions**

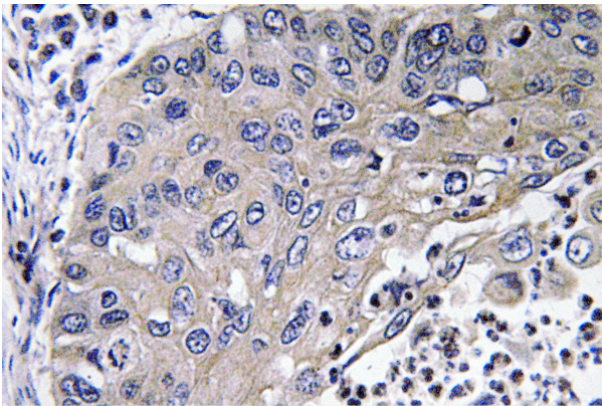
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western Blot analysis of various cells using Cathepsin D Polyclonal Antibody



Immunohistochemistry analysis of Cathepsin D antibody in paraffin-embedded human lung carcinoma tissue.

