



# Cleaved-Cathepsin D HC (L169) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-02280                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Reactivity</b>                  | Human;Rat;Mouse;                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Name</b>                   | CTSD                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human CATD. AA range:150-199                                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>                 | Cleaved-Cathepsin D HC (L169) Polyclonal Antibody detects endogenous levels of fragment of activated Cathepsin D HC protein resulting from cleavage adjacent to L169.                                                                                                                                                                                                                                      |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                      |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Synonyms</b>                    | CTSD;Cathepsin D heavy chain;Cathepsin D light chain;CLN10;CPSD; Cathepsin D                                                                                                                                                                                                                                                                                                                               |
| <b>Observed Band</b>               | 27kD                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Calculated Molecular Weight</b> | 27kD                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Cell Pathway</b>                | 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). .                                                                                                                                                            |
| <b>Tissue Specificity</b>          | Expressed in the aorta extracellular space (at protein level) (PubMed:20551380) . Expressed in liver (at protein level) (PubMed:1426530).                                                                                                                                                                                                                                                                  |
| <b>Function</b>                    | 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 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**

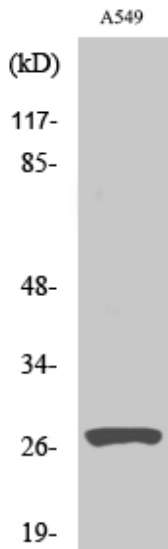
Avoid repeated freezing and thawing!

**Usage suggestions**

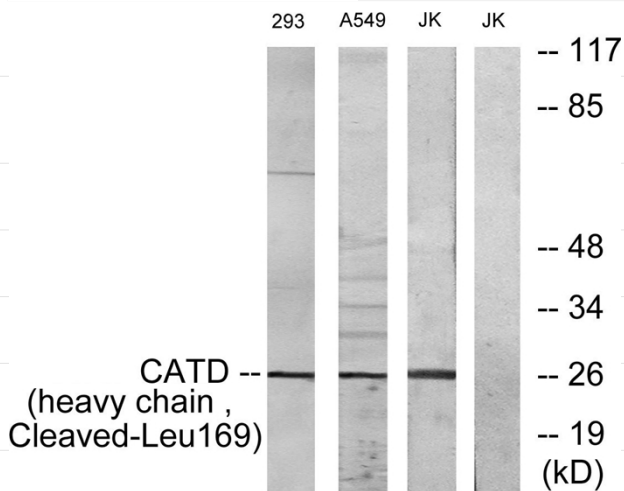
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western Blot analysis of various cells using  
Cleaved-Cathepsin D HC (L169) Polyclonal Antibody



Western blot analysis of lysates from 293, A549, and  
JurKat cells, treated with etoposide 25uM 1h, using  
CATD (heavy chain, Cleaved-Leu169) Antibody. The  
lane on the right is blocked with the synthesized  
peptide.