

# Summary

Production Name	Cleaved-Cathepsin D HC (L169) Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	WB,ELISA	
Reactivity	Human,Rat,Mouse	

### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

# Immunogen

Gene Name	CTSD
Alternative Names	CTSD; CPSD; Cathepsin D
Gene ID	1509.0
SwissProt ID	P07339.The antiserum was produced against synthesized peptide derived from human
	CATD. AA range:150-199

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000.
Molecular Weight	27kD



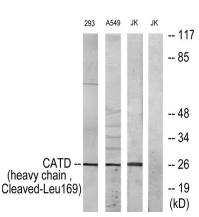
# Background

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],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 developing AD than non-carriers, similarity:Belongs to the peptidase A1 family, subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV, subunit:Consists of a light chain and a heavy chain.,

#### **Research Area**

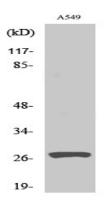
Lysosome;

#### **Image Data**



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.





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

#### Note

For research use only.