Product Name: **Cleaved-Cathepsin D LC (G65) Rabbit Polyclonal Antibody**
Catalog #: **APRab08975**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight	17kDa

Antigen Information

Gene Name	CTSD
Alternative Names	CTSD; CPSD; Cathepsin D
Gene ID	1509.0
SwissProt ID	P07339
Immunogen	The antiserum was produced against synthesized peptide derived from human CATD. AA range:46-95

Background

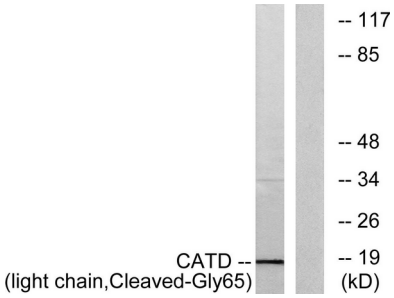
This gene encodes a member of the A1 family of peptidases. The encoded preproprotein is proteolytically processed to

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.,

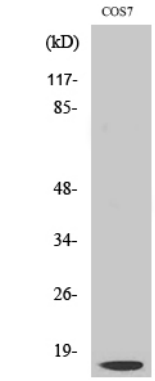
Research Area

Lysosome;

Image Data



Western blot analysis of lysates from COS7 cells, treated with etoposide 25uM 1h, using CATD (light chain,Cleaved-Gly65) Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Cleaved-Cathepsin D LC (G65) Polyclonal Antibody