



# Cathepsin D Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02529
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CTSD
<b>Protein Name</b>	Cathepsin D
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Cathepsin D. AA range:296-345
<b>Specificity</b>	Cathepsin D Polyclonal Antibody detects endogenous levels of Cathepsin D protein.
<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>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CTSD; CPSD; Cathepsin D
<b>Observed Band</b>	46,30kD
<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**

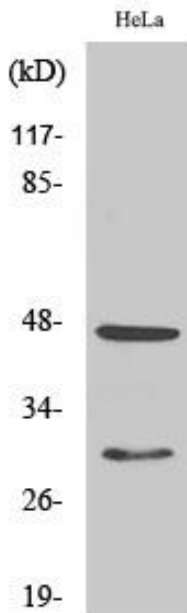
This gene encodes a member of the A1 family of peptidases. The encoded preproprotein is proteolytically processed to generate multiple protein products. These products include the cathepsin D light and heavy chains, which heterodimerize to form the mature enzyme. This enzyme exhibits pepsin-like activity 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**

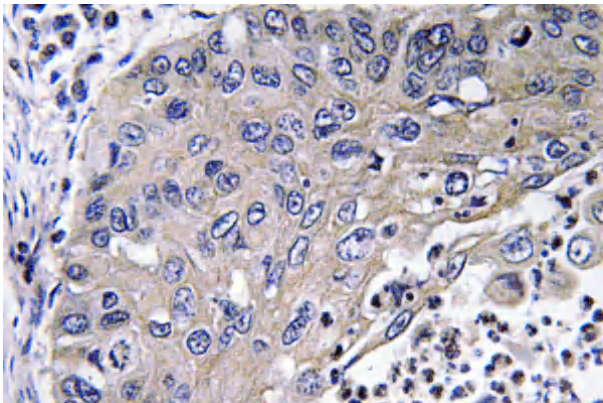
Avoid repeated freezing and thawing!

**Usage suggestions**

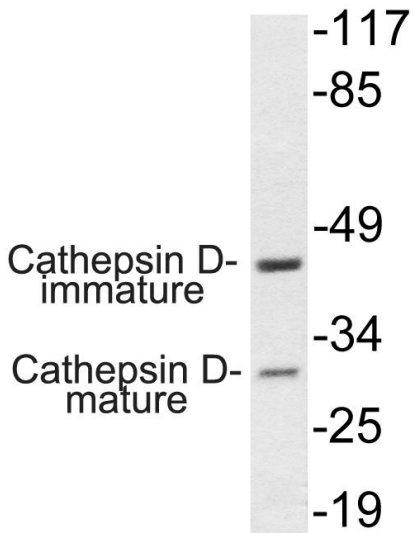
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**

Western Blot analysis of various cells using Cathepsin D Polyclonal Antibody



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



Western blot analysis of lysate from HepG2 cells, using Cathepsin?D antibody.