Best Tools for immunology Research

Cathepsin D Polyclonal Antibody

Catalog No :	YT0681
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	Cathepsin D
Fields :	>>Sphingolipid signaling pathway;>>Autophagy - animal;>>Lysosome;>>Apoptosis;>>Estrogen signaling pathway;>>Tuberculosis;>>Diabetic cardiomyopathy
Gene Name :	CTSD
Protein Name :	Cathepsin D
Human Gene Id :	1509
Human Swiss Prot No :	P07339
Mouse Swiss Prot No :	P18242
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 46,30kD

Cell Pathway : Lysosome;

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],

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 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

Subcellular Location : 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). .

Expression : Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

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