

## Cathepsin D (PT0185R) PT® Rabbit mAb

Catalog No: YM8115

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;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:

Mouse Gene Id: 13033

**Mouse Swiss Prot** 

No:

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

P07339

P18242

**Dilution:** IHC 1:200-1:1000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA

1:5000-1:20000,IP 1:50-1:200,

**Purification:** Protein A

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

Molecularweight: 44kD

1/4



Observed Band: 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

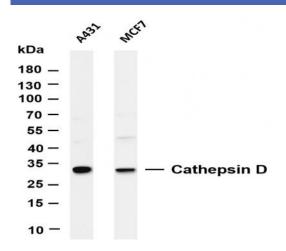
Subcellular Location:

Secreted

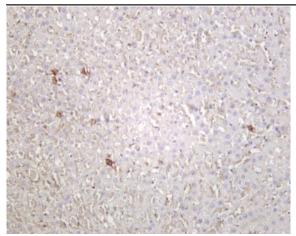
**Expression:** 

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

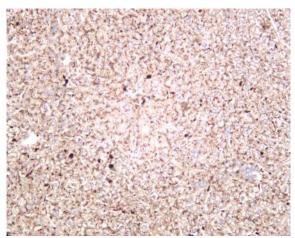
## **Products Images**



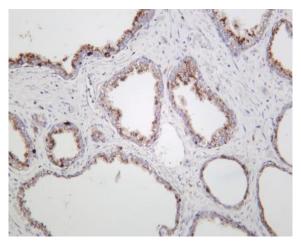
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cathepsin D (PT0185R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: MCF7 Predicted band size: 44kDa Observed band size: 30kDa



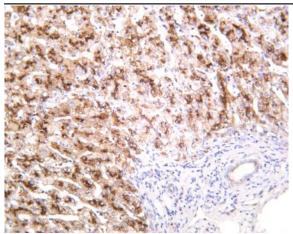
Rat liver was stained with anti-Cathepsin D (PT0185R) rabbit antibody



Mouse liver was stained with anti-Cathepsin D (PT0185R) rabbit antibody  $\,$ 



Human prostate was stained with anti-Cathepsin D (PT0185R) rabbit antibody



Human liver was stained with anti-Cathepsin D (PT0185R) rabbit antibody