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Cathepsin D (ANT0085R) Rabbit mAb

CatalogNo: ANT8115 Recombinant R

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

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
Human, Mouse, Rat,
WB, IHC, IF, IP, ELISA

MW Isotype

44kD (Calculated)IgG,Kappa

44kD (Observed)

Recommended Dilution Ratios

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,

Storage

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

Basic Information

Clonality Monoclonal

Clone Number ANT0085R

Immunogen Information Specificity

Endogenous

Target Information

Gene name CTS

Protein Name Cathepsin D

| Organism | Gene ID | UniProt ID |
|----------|----------------|-----------------|
| Human | <u>1509</u> ; | <u>P07339</u> ; |
| Mouse | <u>13033</u> ; | <u>P18242</u> ; |

Cellular Secreted

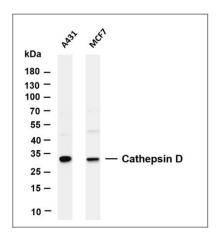
Localization

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

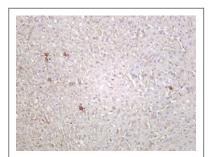
Function

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 nondemented 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.,

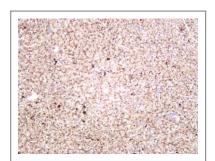
Validation Data



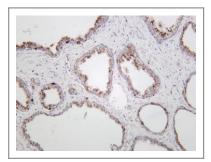
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cathepsin D (ANT0085R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: MCF7 Predicted band size: 44kDa Observed band size: 30kDa



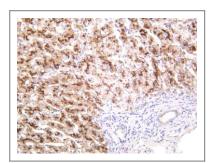
Rat liver was stained with anti-Cathepsin D (ANT0085R) rabbit antibody



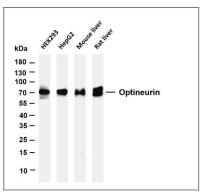
Mouse liver was stained with anti-Cathepsin D (ANT0085R) rabbit antibody



Human prostate was stained with anti-Cathepsin D (ANT0085R) rabbit antibody



Human liver was stained with anti-Cathepsin D (ANT0085R) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cathepsin D (ANT0085R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: Mouse brain Predicted band size: 44kDa Observed band size: 44kDa