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Anti-Cathepsin D Picoband Antibody

Catalog # ABO12540

Specification

Anti-Cathepsin D Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P07339
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cathepsin D(CTSD) detection. Tested with WB, IHC-P in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Cathepsin D Picoband Antibody - Additional Information

Gene ID 1509

Other Names
Cathepsin D, 3.4.23.5, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

Calculated MW
44552 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
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). .

Tissue Specificity
Expressed in the aorta extrcellular space (at protein level). .

Protein Name
Cathepsin D

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human Cathepsin D recombinant protein (Position: M201-L412). Human Cathepsin D shares 84.4% and 84% amino acid (aa) sequence identity with mouse and rat Cathepsin D, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-Cathepsin D Picoband Antibody - Protein Information

Name CTSD

Synonyms CPSD

Function
Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation (PubMed:27333034). Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

Cellular Location
Lysosome. Melanosome. Secreted, extracellular space. Note=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)

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

Anti-Cathepsin D Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Cathepsin D Picoband Antibody - Images

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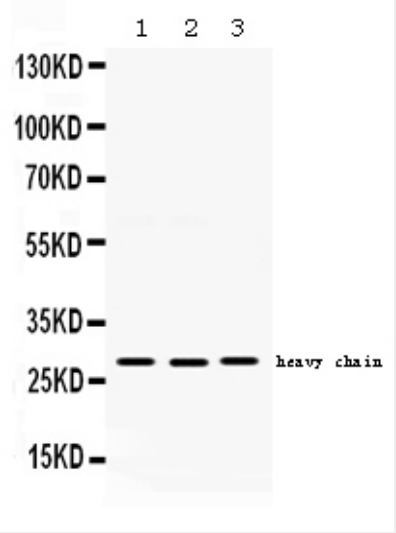
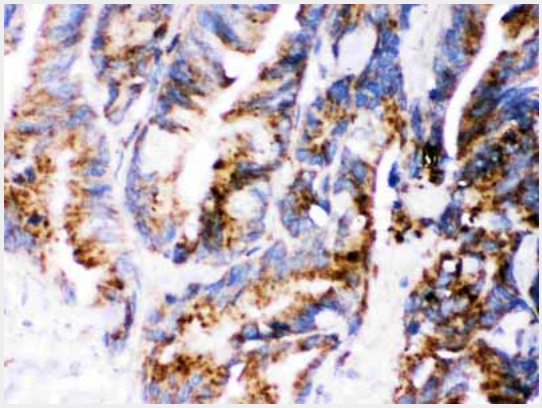


Western blot analysis of Cathepsin D expression in HEPG2 whole cell lysates (lane 1), A549 whole cell lysates (lane 2) and PANC whole cell lysates (lane 3). Cathepsin D at 28KD was detected using rabbit anti- Cathepsin D Antigen Affinity purified polyclonal antibody (Catalog # ABO12540) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



Cathepsin D was detected in paraffin-embedded sections of human Intestinal cancer tissues using rabbit anti- Cathepsin D Antigen Affinity purified polyclonal antibody (Catalog # ABO12540) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-Cathepsin D Picoband Antibody - Background

Cathepsin D is a protein that in humans is encoded by the CTSD gene. This proteinase is a member of the peptidase C1 family, having a specificity similar to but narrower than that of pepsin A. It is mapped to 11p15.5. The cDNA encodes a 412-amino acid protein with 20 and 44 amino acids in a pre- and prosegment, respectively. Cathepsin D is one of the lysosomal proteinases. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease and it has been considered as a breast cancer tumor marker.