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Cathepsin B Rabbit pAb

Catalog No.: A0967 **10 Publications**

Basic Information

Observed MW
24kDa/27kDa/44kDa

Calculated MW
38kDa

Category
Primary antibody

Applications
WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity
Human, Mouse, Rat

Background

This gene encodes a member of the C1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B light and heavy chains, which can dimerize to form the double chain form of the enzyme. This enzyme is a lysosomal cysteine protease with both endopeptidase and exopeptidase activity that may play a role in protein turnover. It is also known as amyloid precursor protein secretase and is involved in the proteolytic processing of amyloid precursor protein (APP). Incomplete proteolytic processing of APP has been suggested to be a causative factor in Alzheimer's disease, the most common cause of dementia. Overexpression of the encoded protein has been associated with esophageal adenocarcinoma and other tumors. Both Cathepsin B and Cathepsin L are involved in the cleavage of the spike protein from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) upon its entry to the human host cell. Multiple pseudogenes of this gene have been identified.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
1508

Swiss Prot
P07858

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 18-339 of human Cathepsin B (NP_001899.1).

Synonyms
KWE; APPS; CPSB; RECEUP; Cathepsin B

Contact

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Product Information

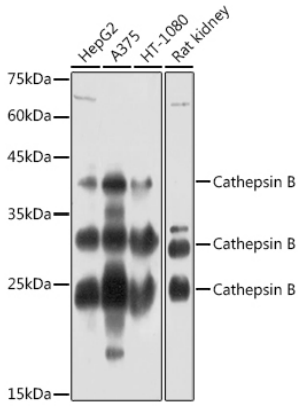
Source
Rabbit

Isotype
IgG

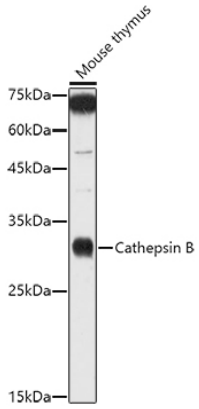
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

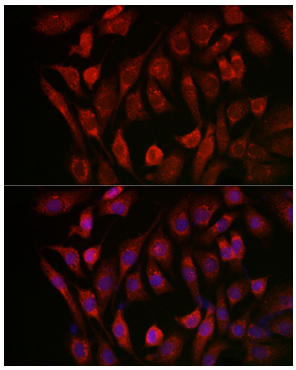
Validation Data



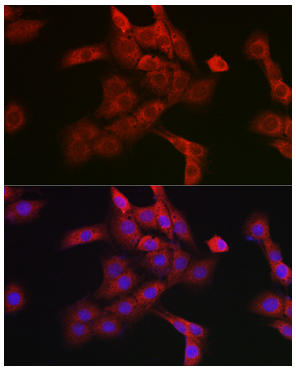
Western blot analysis of various lysates using Cathepsin B Rabbit pAb (A0967) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60s.



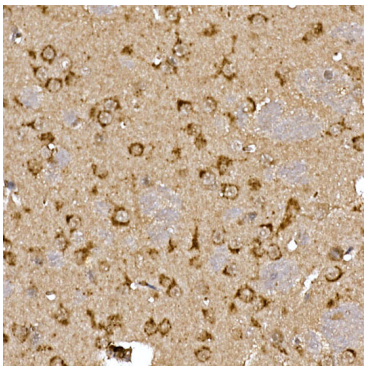
Western blot analysis of lysates from Mouse thymus, using Cathepsin B Rabbit pAb (A0967) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Enhanced Kit (RM00021).
Exposure time: 180s.



Immunofluorescence analysis of NIH/3T3 cells using Cathepsin B Rabbit pAb (A0967) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

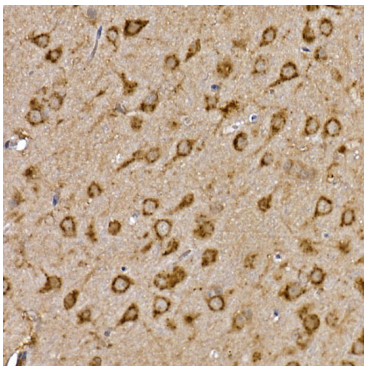


Immunofluorescence analysis of PC-12 cells using Cathepsin B Rabbit pAb (A0967) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

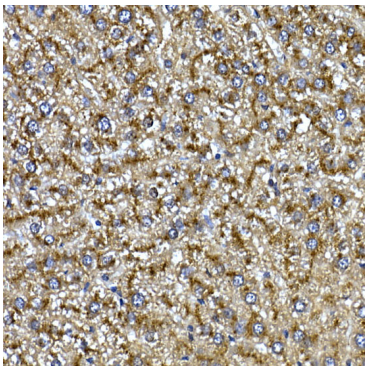


Immunohistochemistry analysis of paraffin-embedded Mouse brain using Cathepsin B Rabbit pAb (A0967) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat brain using Cathepsin B Rabbit pAb (A0967) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat liver using Cathepsin B Rabbit pAb (A0967) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.