

CATB Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7367C

Specification

CATB Antibody (Center) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	P07858
Other Accession	Q4R5M2
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	198-227

CATB Antibody (Center) - Additional Information

Gene ID 1508

Other Names

Cathepsin B, APP secretase, APPS, Cathepsin B1, Cathepsin B light chain, Cathepsin B heavy chain, CTSB, CPSB

Target/Specificity

This CATB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 198-227 amino acids from the Central region of human CATB.

Dilution

FC~~1:10~50
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CATB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CATB Antibody (Center) - Protein Information

Name CTSB

Synonyms CPSB

Function Thiol protease which is believed to participate in intracellular degradation and turnover of proteins (PubMed:[12220505](#)). Cleaves matrix extracellular phosphoglycoprotein MEPE (PubMed:[12220505](#)). Involved in the solubilization of cross-linked TG/thyroglobulin in the thyroid follicle lumen (By similarity). Has also been implicated in tumor invasion and metastasis (PubMed:[3972105](#)).

Cellular Location

Lysosome. Melanosome. Secreted, extracellular space {ECO:0000250|UniProtKB:A1E295}. Apical cell membrane {ECO:0000250|UniProtKB:P10605}; Peripheral membrane protein {ECO:0000250|UniProtKB:P10605}; Extracellular side {ECO:0000250|UniProtKB:P10605}. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Localizes to the lumen of thyroid follicles and to the apical membrane of thyroid epithelial cells (By similarity) {ECO:0000250|UniProtKB:P10605, ECO:0000269|PubMed:17081065}

Tissue Location

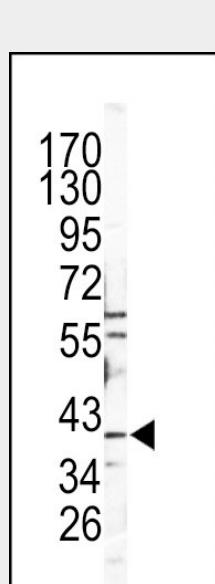
Expressed in the stratum spinosum of the epidermis. Weak expression is detected in the stratum granulosum

CATB Antibody (Center) - Protocols

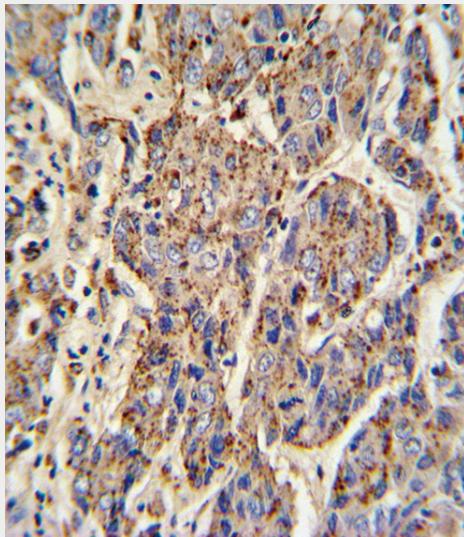
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

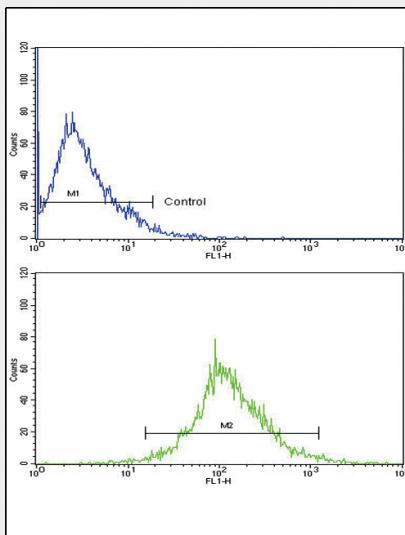
CATB Antibody (Center) - Images



Western blot analysis of CATB Antibody (Center) (Cat.# AP7367c) in Y79 cell line lysates (35ug/lane). CATB (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with CATB Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of HepG2 cells using CATB Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CATB Antibody (Center) - Background

The protein CATB is a lysosomal cysteine proteinase composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. 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 disease, the most common cause of dementia. Overexpression of the protein, which is a member of the peptidase C1 family, has been associated with esophageal adenocarcinoma and other tumors.

CATB Antibody (Center) - References

Zhang,H., J. Immunol. 182 (11), 6993-7000 (2009)
Duncan,J.A., J. Immunol. 182 (10), 6460-6469 (2009)

CATB Antibody (Center) - Citations

- [Effects of the lysosomal destabilizing drug siramesine on glioblastoma in vitro and in vivo.](#)