Rabbit anti-Mouse Cathepsin B Monoclonal Antibody | anti-CTSB antibody

Recombinant Anti-Cathepsin B Antibody, Rabbit Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257080	**Rabbit**	**Mouse**	**Immunohistochemistry**

PRODUCT SYNONYMS

Cathepsin B; Monoclonal Antibody; Recombinant Anti-Cathepsin B Antibody; Rabbit Monoclonal; Cathepsin B/CTSB Antibody; Rabbit MAb; cathepsin B; Anti-CB Antibody; anti-CTSB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	010
Specificity	Mouse Cathepsin B/CTSB
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CTSB antibody	IHC (Immunohistochemistry)
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Mouse Cathepsin B/CTSB Protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Mouse Cathepsin B/CTSB (rM Cathepsin B/CTSB).
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES

IHC (Immunohiostchemistry)
Immunochemical staining of mouse CTSB in mouse kidney with rabbit monoclonal antibody (1:200, formalin-fixed paraffin embedded sections).

IHC (Immunohistochemistry)
Immunochemical staining of mouse CTSB in mouse liver with rabbit monoclonal antibody (1:200, formalin-fixed paraffin embedded sections).

ADDITIONAL INFORMATION

Related Product Information for anti-CTSB antibody	Cathepsin B is a papain-family cysteine protease that is normally located in lysosomes, where it is involved in the turnover of proteins and plays various roles in maintaining the normal metabolism of cells. This protease has been implicated in pathological conditions, e.g., tumor progression and arthritis. In disease conditions, increases in the expression of cathepsin B occur at both the gene and protein levels. Cathepsin B is synthesized as a preproenzyme and the primary pathways for its normal trafficking to the lysosome utilize mannose 6-phosphate receptors (MPRs). Mature cathepsin B has the ability to degrade several extracellular matrix components at both neutral and acidic pH and has been implicated in the progression of several human and rodent tumors progression and arthritis. Cathepsin B expression is increased in many human cancers at the mRNA, protein and activity levels. It is also frequently overexpressed in premalignant lesions, an observation that associates this protease with local invasive stages of cancer. Increased expression of cathepsin B in primary cancers, and especially in preneoplastic lesions, suggests that this enzyme might have pro-apoptotic features. Active cathepsin B is also secreted from tumours, a mechanism likely to be facilitated by lysosomal exocytosis or extracellular processing by surface activators. Cathepsin B is localized to caveolae on the tumour surface, where binding to the annexin II heterotetramer occurs. Thus CTSB is suggested as a tumor marker. Additionally, Cathepsin B can degrade extracellular matrix proteins, such as collagen IV and laminin, and can activate the precursor form of urokinase plasminogen activator (uPA), perhaps thereby initiating an extracellular proteolytic cascade.
References	Mai J, et al. (2000) Cell surface complex of cathepsin B/annexin II tetramer in malignant progression. Biochim Biophys Acta. 1477(1-2): 215-30.Podgorski I, et al. (2003) Cathepsin B and its role(s) in cancer progression. Biochem Soc Symp. (70): 263-76.Yan S, et al. (2003) Molecular regulation of human cathepsin B: implication in pathologies. Biol Chem. 384(6): 845-54.Roshy S, et al. (2003) Pericellular cathepsin B and malignant progression. Cancer Metastasis Rev. 22(2-3): 271-86.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6681079
NCBI GeneID	13030
NCBI Accession #	NP_031824.1
NCBI GenBank Nucleotide #	NM_007798.3
UniProt Accession #	P10605; Q3UDW7
Molecular Weight	37,280 Da
NCBI Official Full Name	cathepsin B preproprotein
NCBI Official Synonym Full Names	cathepsin B
NCBI Official Symbol	Ctsb
NCBI Official Synonym Symbols	CB
NCBI Protein Information	cathepsin B
UniProt Protein Name	Cathepsin B
UniProt Gene Name	**Ctsb**

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/cathepsin-b-antibody-clone-010-immunohistochemistry-elisa/257080