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Cathepsin B (AB2844) Rabbit mAb

M0525

Key Features

Host Species
• Rabbit

Reactivity
• Human

Applications
• WB, IHC-P, ELISA

MW
• 38 kDa (calculated)
• 39-44 kDa (observed)

Isotype
• IgG

Recommended Dilution Ratios

Application	Dilution
WB, IHC-P, ELISA	WB, 1:1000-1:2000 | IHC-P, 1:200-1:800 | ELISA, Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Storage

Storage Conditions	Store at-20℃. Avoid freeze / thaw cycles.
Storage buffer	The antibody is provided in liquid form in phosphate - buffered saline with 50% glycerol, 0.05% BSA, and 0.02% sodium azide.

Basic Information

Clonality	Monoclonal
Clone Number	AB2844
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 27 - 156 of human Cathepsin B.
Specificity	This antibody detects endogenous levels of Cathepsin B protein.
Purification	Affinity purification Protein A
Concentration	Product concentration may vary by batch. Please refer to the product COA for details.

Target Information

Gene name	CTSB
Protein Name	Cathepsin B

Database Link

Organism	Swiss Prot.	Gene ID
Human	P07858	1508

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

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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.