
Product Name: KD-Validated Cathepsin B Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00168

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000
Molecular Weight	Calculated MW: 37.8kDa

Antigen Information

Gene Name	CTSB CTSB; Cathepsin B; APP Secretase; Cathepsin B1; EC 3.4.22.1; APPS; CPSB; Keratolytic Winter
Alternative Names	Erythema (Oudtshoorn Skin Disease); Epididymis Secretory Sperm Binding Protein; Amyloid Precursor Protein Secretase; Cysteine Protease; EC 3.4.22; RECEUP; KWE
Gene ID	1508.0
SwissProt ID	P07858
Immunogen	A synthesized peptide derived from human Cathepsin B

Background

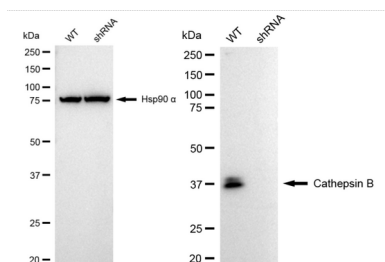
This gene encodes a member of the C1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate multiple protein

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. [provided by RefSeq, Sep 2020]

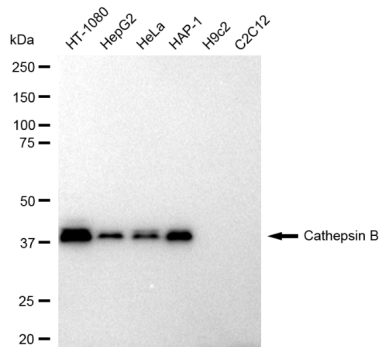
Research Area

Neuroscience, Signal Transduction, Cancer, Kits/ Lysates/ Other

Image Data



Western blotting analysis using Cathepsin B antibody (KVA00168). Cathepsin B expression in wild type (WT) and Cathepsin B shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Cathepsin B antibody (KVA00168, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Cathepsin B antibody (KVA00168). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Cathepsin B antibody (KVA00168, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.