

Cathepsin L Monoclonal Antibody (33-2), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	33-2
Conjugate	Unconjugated
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2-7.4
Contains	no preservative
Storage conditions	-20°C
RRID	AB_10596643

Applications	Tested Dilution	Publications
Western Blot (WB)	1 µg/mL	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	5 µg/mL	-
ELISA (ELISA)	Assay-Dependent	-

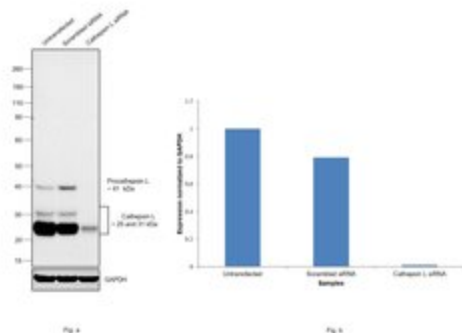
Product Specific Information

Description: Cathepsin L is a lysosomal cysteine proteinase consisting of a heavy chain of about 25 kDa and a light chain of about 5 kDa derived proteolytically from the same precursor. Cathepsin L has been shown to be produced by many different cell types. Since cathepsin L is capable of degrading protein constituents of the extracellular matrix it is assumed to play a crucial role in tumor progression and metastasis and a number of other disorders where the destruction of the extracellular matrix is the major cause of disease (e.g. rheumatoid arthritis, neurodegeneration).

Applications Tested: ELISA, Immunohistochemistry (Frozen), Western Blotting.

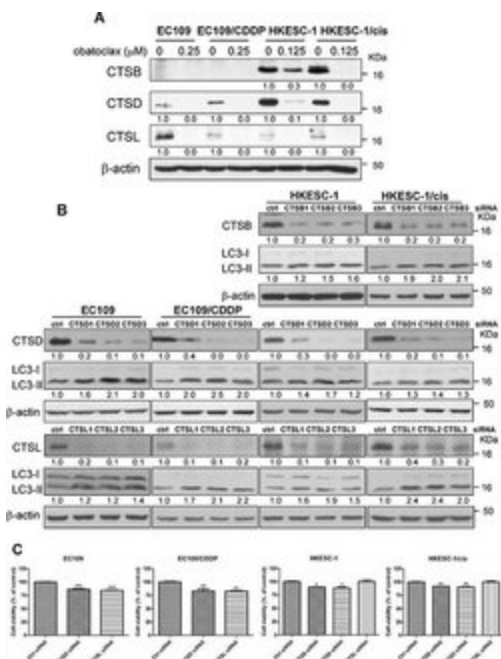
Cathepsin L Antibody (BMS1032)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. A549 cells were transfected with Cathepsin L siRNA and decrease in signal intensity was observed in Western Blot application using Anti-Cathepsin L Monoclonal Antibody (33-2), eBioscience™ (Product # BMS1032). Knockdown validation info.

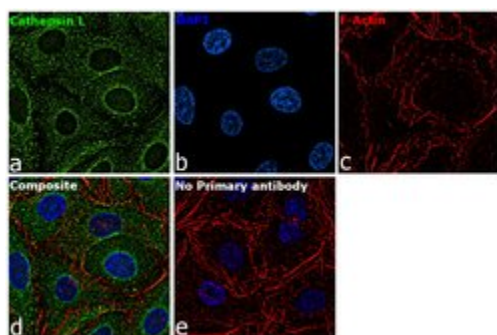


Cathepsin L Antibody (BMS1032)

Effects of obatoclax on lysosomal functions (A) Cells were treated with obatoclax at the indicated concentrations for 48 h. The active forms of cathepsin B, D and L were determined by Western blot analysis. Quantification of the ratios of CTSB/β-actin, CTSD/β-actin, and CTSL/β-actin is shown below each gel lane. The ratios were normalized to control cells. (B) The efficacy of cathepsin B (CTSB), cathepsin D (CTSD), or cathepsin L (CTSL) by respective siRNA was confirmed by Western blot analysis at 48 h post-transfection. Nontargeting siRNA was used as control siRNA, which has no homology to any known mammalian genes. Targeting CTSB, D, or L by RNA interference increased the conversion of LC3-I to LC3-II at 48 h post-transfection. Quantification of the ratios of CTSB/β-actin, CTSD/β-actin, CTSL/β-actin and LC3-II/β-actin is shown below each gel lane. The ratios were normalized to control siRNA-transfected cells. (C) Cell viability was determined at 48 h post-transfection of distinct siRNA targeting CTSB, D or L by MTT assay. The siRNAs used were CTSB1 siRNA, CTSD2 siRNA, and CTSL2 siRNA. Results were averaged and blots were representative of 3 independent experiments. *P < 0.05, **P < 0.01, ***P < 0.001 as compared to control siRNA transfected-cells. Knockdown validation info.



Product Images For Cathepsin L Monoclonal Antibody (33-2), eBioscience™



Cathepsin L Antibody (BMS1032) in ICC/IF

Immunofluorescence analysis of Cathepsin L was performed using 70% confluent log phase A549 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Cathepsin L Monoclonal Antibody (33-2), eBioscience™ (Product # BMS1032) at 5 μg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723), (1:2000), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

1 Reference

Western Blot (1)

Oncotarget

Obatoclox impairs lysosomal function to block autophagy in cisplatin-sensitive and -resistant esophageal cancer cells.

"BMS1032 was used in western blot to investigate the effect of Obatoclox in esophageal cancer cells"

Authors: Yu L,Wu WK,Gu C,Zhong D,Zhao X,Kong Y,Lin Q,Chan MT,Zhou Z,Liu S

Species
Human

Dilution
1:1000

Year
2016

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.