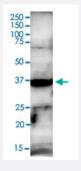


CTSL1 monoclonal antibody, clone AT18F6

Catalog # MAB2047 Size 100 uL

Applications



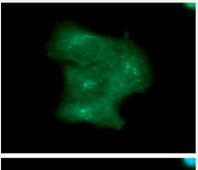
Western Blot (Cell lysate)

Western blot analysis of A-549 cell lysate.



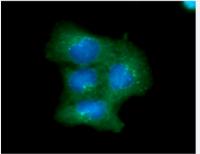
Western Blot (Recombinant protein)

Western blot analysis of Lane 1: CTSB recombinant protein, Lane 2: CTSD recombinant protein, Lane 3: CTSE recombinant protein, Lane 4: CTSF recombinant protein, Lane 5: CTSH recombinant protein, Lane 6: CTSK recombinant protein, Lane 7: CTSL recombinant protein, Lane 8: CTSS recombinant protein, Lane 9: CTSW recombinant protein, Lane 10: CTSZ recombinant protein.

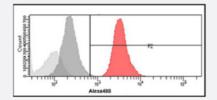


Immunofluorescence

Immunofluorescence analysis of A549 cells. The cell was stained with CTSL1 monoclonal antibody, clone AT18F6 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).







Flow Cytometry

Flow cytometric analysis of A549 cells. The cell was stained with CTSL1 monoclonal antibody, clone AT18F6 at 2-5 ug for 1x1x106cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Specification	
Product Description	Mouse monoclonal antibody raised against partial recombinant CTSL1.
lmmunogen	Recombinant protein corresponding to amino acids 18-333 of human CTSL1.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	lgG2a, kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications



Western Blot (Cell lysate)

Western blot analysis of A-549 cell lysate.

Western Blot (Recombinant protein)

Western blot analysis of Lane 1: CTSB recombinant protein, Lane 2: CTSD recombinant protein, Lane 3: CTSE recombinant protein, Lane 4: CTSF recombinant protein, Lane 5: CTSH recombinant protein, Lane 6: CTSK recombinant protein, Lane 7: CTSL recombinant protein, Lane 8: CTSS recombinant protein, Lane 9: CTSW recombinant protein, Lane 10: CTSZ recombinant protein.

- Immunocytochemistry
- Immunofluorescence

Immunofluorescence analysis of A549 cells. The cell was stained with CTSL1 monoclonal antibody, clone AT18F6 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay
- Flow Cytometry

Flow cytometric analysis of A549 cells. The cell was stained with CTSL1 monoclonal antibody, clone AT18F6 at 2-5 ug for 1x1x10⁶cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Gene Info — CTSL1	
Entrez GeneID	<u>1514</u>
Protein Accession#	NP_001903
Gene Name	CTSL1
Gene Alias	CATL, CTSL, FLJ31037, MEP
Gene Description	cathepsin L1
Omim ID	116880
Gene Ontology	<u>Hyperlink</u>



Product Information

Gene Summary

The protein encoded by this gene is a lysosomal cysteine proteinase that plays a major role in intracellular protein catabolism. Its substrates include collagen and elastin, as well as alpha-1 protea se inhibitor, a major controlling element of neutrophil elastase activity. The encoded protein has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. This protein, which is a member of the peptidase C1 family, is a dimer composed of disulfide-linked heavy and light chains, both produced from a single protein precursor. At least two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq

Other Designations

 $\label{thm:continuity} OTTHUMP00000021601\\ |OTTHUMP00000021602\\ |OTTHUMP00000063566\\ | cathepsin L| major excreted protein$

Publication Reference

Cathepsin L inhibition suppresses drug resistance in vitro and in vivo: a putative mechanism.

Zheng X, Chu F, Chou PM, Gallati C, Dier U, Mirkin BL, Mousa SA, Rebbaa A.

American Journal of Physiology. Cell Physiology 2009 Jan; 296(1):C65.

Application: WB-Ce, Human, SaOS2 cells

 The lysosomal cysteine protease cathepsin L regulates keratinocyte proliferation by control of growth factor recycling.

Reinheckel T, Hagemann S, Dollwet-Mack S, Martinez E, Lohmuller T, Zlatkovic G, Tobin DJ, Maas-Szabowski N, Peters C. Journal of Cell Science 2005 Aug; 118(Pt 15):3387.

Application: IHC-P, Mouse, Mouse skin

Processing and activation of lysosomal proteinases.

Ishidoh K, Kominami E.

Biological Chemistry 2002 Dec; 383(12):1827.

Pathway

- Antigen processing and presentation
- Lysosome