

Human Cathepsin S antibody

Catalog Number: ATGA0264

PRODUCT INFORMATION

Catalog number

ATGA0264

Clone No.

AT1F9

Product type

Monoclonal Antibody

UnitProt No.

P25774

NCBI Accession No.

NP_004070

Alternative Names

Cathepsin S, MGC3886

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human CTSS (17-331aa) purified from E. coli

Isotype

IgG2b kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

Human Cathepsin S antibody

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

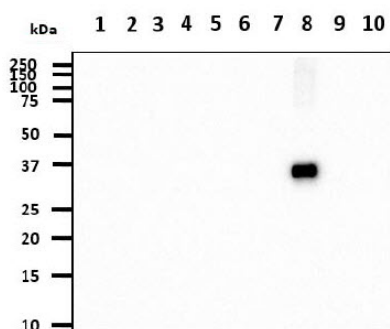
CTSS (Cathepsin S) is a lysosomal enzyme that belongs to the papain family of cysteine proteases. This protein is expressed by antigen presenting cells including macrophages, B-lymphocytes, dendritic cells and microglia. Moreover, CTSS is expressed in some epithelial cells. In contrast, cortical thymic epithelial cells do not express CTSS. Normal epidermal keratinocytes do not express CTSS. However, level of CTSS is elevated in psoriatic keratinocytes due to stimulation by proinflammatory factors. CTSS can function as an elastase over a broad pH range in alveolar macrophages.

General References

- Shi. G.P., et al. (1994) J Biol Chem 269: 11530-11536.
Lemere. C.A., et al. (1995) Am J Pathol 146(4): 848-860.
Shi. G.P., et al. (1992) J Biol Chem 267(11): 7258-7262.

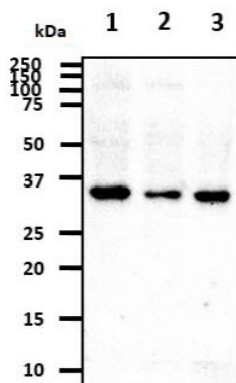
DATA

Western blot analysis (WB)



The recombinant proteins (20ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CTSS antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1.: Recombinant Human CTSB
Lane 2.: Recombinant Human CTSD
Lane 3.: Recombinant Human CTSE
Lane 4.: Recombinant Human CTSF
Lane 5.: Recombinant Human CTSH
Lane 6.: Recombinant Human CTSK
Lane 7.: Recombinant Human CTSL
Lane 8.: Recombinant Human CTSS
Lane 9.: Recombinant Human CTSW
Lane 10.: Recombinant Human CTSZ



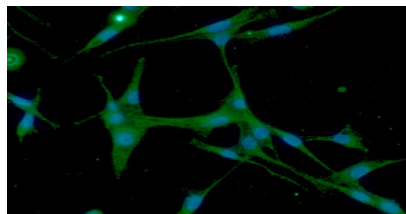
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CTSS antibody (1:500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1.: HeLa cell lysate
Lane 2.: U87MG cell lysate
Lane 3.: A549 cell lysate

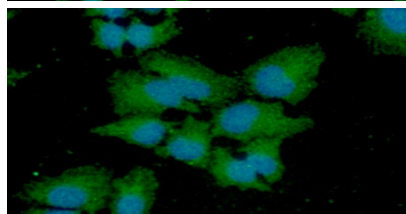
Immunocytochemistry/Immunofluorescence (ICC/IF)

Human Cathepsin S antibody

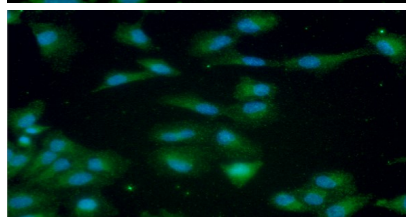
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ICC/IF analysis of CTSS in U87MG cells. The cell was stained with ATGA0264 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



ICC/IF analysis of CTSS in HeLa cells. The cell was stained with ATGA0264 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



ICC/IF analysis of CTSS in A549 cells. The cell was stained with ATGA0264 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).