

Mouse anti-Human Stefin B Monoclonal Antibody | anti-CSTB antibody

Anti-Stefin B Antibody (monoclonal, 2B6)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125155	Mouse	Human	Flow Cytometry, Functional Assay, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Stefin B; Monoclonal Antibody; Anti-Stefin B Antibody (monoclonal; 2B6); Cystatin-B; CPI-B; Liver thiol proteinase inhibitor; Stefin-B; CSTB; CST6; STFB; Cystatin B (stefin B); anti-CSTB antibody

PRODUCT SPECIFICATIONS

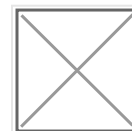
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	2B6
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	98
Applicable Applications for anti-CSTB antibody	FCM/FACS (Flow Cytometry), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Stefin B recombinant protein (Position: M1-F98). Human Stefin B shares 78.6 % amino acid (aa) sequence identity with both mouse and rat Stefin B.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P, IHC-F and ICC.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of PC-3 cells using anti- Stefin B antibody (M02794). Overlay histogram showing PC-3 cells stained with M02794 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti- Stefin B Antibody (M02794, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight® 488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of PC-3 cells using anti- Stefin B antibody (M02794). Overlay histogram showing PC-3 cells stained with M02794 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti- Stefin B Antibody (M02794, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight® 488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of Stefin B using anti-Stefin B antibody (M02794). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human U-87MG whole cell lysates, Lane 2: human SW620 whole cell lysates, Lane 3: human U-937 whole cell lysates, Lane 4: human Caco-2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Stefin B antigen affinity purified monoclonal antibody at 0.5 ug/ml overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a Biotin Conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system.

ADDITIONAL INFORMATION

Related Product Information for anti-CSTB antibody	Description: Mouse IgG monoclonal antibody for Stefin B detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human. Background: Cystatin B (CSTB), also called STFB, is a small protein that is a member of the superfamily of cysteine protease inhibitors. It has been isolated from human spleen and liver and its amino acid sequence has been fully determined. The cystatin B gene is located on 21q22.3. It is widely distributed and is localized mostly intracellularly, but has been found extracellularly. The protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins I, h and b. Its role is thought to be as a protector against the proteinases leaking from lysosomes. A cystatin B multiprotein complex might have a specific cerebellar function, and that the loss of this function might contribute to the etiopathogenesis of EPM1. Upon differentiation to myotubes, CSTB becomes excluded from the nucleus and lysosomes, suggesting that the subcellular distribution of CSTB is dependent on the differentiation status of the cell.
References	1. Alakurtti, K., Weber, E., Rinne, R., Theil, G., de Haan, G.-J., Lindhout, D., Salmikangas, P., Saukko, P., Lahtinen, U., Lehesjoki, A.-E. Loss of lysosomal association of cystatin B proteins representing progressive myoclonus epilepsy, EPM1, mutations. Europ. J. Hum. Genet. 13: 208-215, 2005. Note: Erratum: Europ. J. Hum. Genet. 13: 264 only, 2005. 2. Antonarakis, S. Personal Communication. Geneva, Switzerland 4/8/1997. 3. Bespalova, I. N., Adkins, S., Pranzatelli, M., Burmeister, M. Novel cystatin B mutation and diagnostic PCR assay in an Unverricht-Lundborg progressive myoclonus epilepsy patient. Am. J. Med. Genet. 74: 467-471, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503117
NCBI GeneID	1476
NCBI Accession #	NP_000091.1
NCBI GenBank Nucleotide #	NM_000100.3
UniProt Accession #	P04080
Molecular Weight	11,140 Da
NCBI Official Full Name	cystatin-B
NCBI Official Synonym Full Names	cystatin B
NCBI Official Symbol	CSTB
NCBI Official Synonym Symbols	PME; ULD; CST6; EPM1; STFB; CPI-B; EPM1A
NCBI Protein Information	cystatin-B
UniProt Protein Name	Cystatin-B
UniProt Gene Name	CSTB

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/stefin-b-antibody-clone-2b6-flow-cytometry-immunocytochemistry-immunohistochemistry-western-blot-elisa/125155>