

Anti-PSMD5 Antibody Picoband®

Catalog Number: A12220-1

About PSMD5

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. This gene encodes a non-ATPase subunit of the 19S regulator base that functions as a chaperone protein during 26S proteasome assembly.

Overview

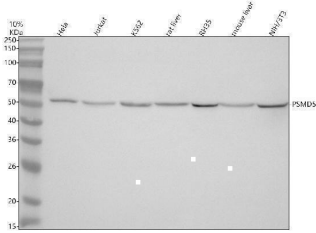
Product Name	Anti-PSMD5 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PSMD5 Antibody Picoband® catalog # A12220-1. Tested in WB, IHC, ICC/IF, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q16401

Technical Details

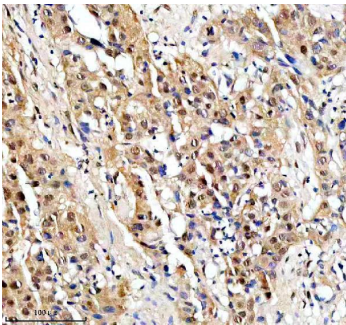
Immunogen	E.coli-derived human PSMD5 recombinant protein (Position: M1-K493). Human PSMD5 shares 90.1% amino acid (aa) sequence identity with mouse PSMD5.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat

Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human
Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human
Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Human
ELISA, 0.1-0.5 ug/ml

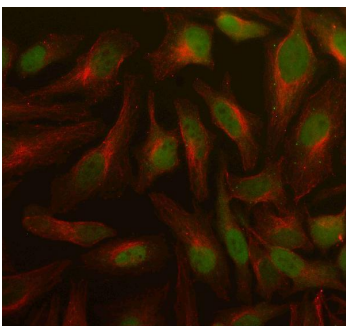
Anti-PSMD5 Antibody Picoband® (A12220-1) Images



Western blot analysis of PSMD5 using anti-PSMD5 antibody (A12220-1). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: rat RH35 whole cell lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PSMD5 antigen affinity purified polyclonal antibody (A12220-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for PSMD5 at approximately 56 kDa. The expected band size for PSMD5 is at 56 kDa.

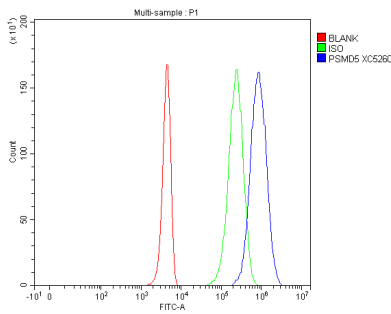


IHC analysis of PSMD5 using anti-PSMD5 antibody (A12220-1). PSMD5 was detected in a paraffin-embedded section of human bladder cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMD5 Antibody (A12220-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IF analysis of PSMD5 using anti-PSMD5 antibody (A12220-1) and anti-Beta Tubulin antibody (M01857-3). PSMD5 was detected in an immunocytochemical section of HeLa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PSMD5 Antibody (A12220-1) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Flow Cytometry analysis of 293T cells using anti-PSMD5 antibody (A12220-1). Overlay histogram showing 293T cells



stained with A12220-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PSMD5 Antibody (A12220-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-PSMD5 Antibody

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