

## Anti-Zebrafish PSMC2 Antibody Picoband®

Catalog Number: AZQ7T3B1

### About PSMC2

26S protease regulatory subunit 7, also known as 26S proteasome AAA-ATPase subunit Rpt1, is an enzyme that in humans is encoded by the PSMC2 gene. 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. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. This subunit has been shown to interact with several of the basal transcription factors so, in addition to participation in proteasome functions, this subunit may participate in the regulation of transcription. This subunit may also compete with PSMC3 for binding to the HIV tat protein to regulate the interaction between the viral protein and the transcription complex. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

### Overview

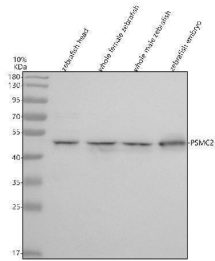
Product Name	Anti-Zebrafish PSMC2 Antibody Picoband®
Reactive Species	Zebrafish
Description	Boster Bio Anti-Zebrafish PSMC2 Antibody Picoband® catalog # AZQ7T3B1. Tested in WB, IHC applications. This antibody reacts with Zebrafish. The brand Picoband indicates this is a premium antibody that guarantees 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	Q7T3B1

### Technical Details

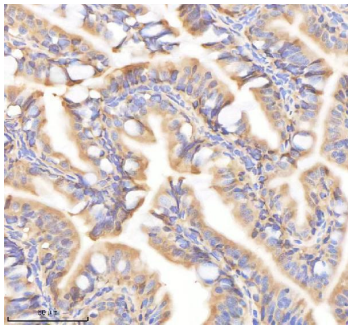
Immunogen	E.coli-derived zebrafish PSMC2 recombinant protein (Position: K34-N433).
Form	Lyophilized

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, Zebrafish Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Zebrafish

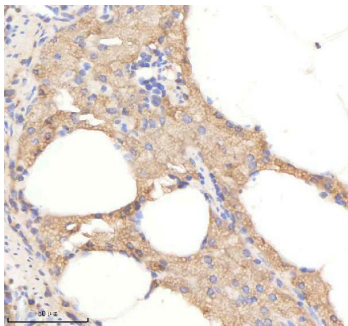
## Anti-Zebrafish PSMC2 Antibody Picoband® (AZQ7T3B1) Images



Western blot analysis of PSMC2 using anti-PSMC2 antibody (AZQ7T3B1). 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: zebrafish head tissue lysates, Lane 2: whole female zebrafish tissue lysates, Lane 3: whole male zebrafish tissue lysates, Lane 4: zebrafish embryo tissue 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-PSMC2 antigen affinity purified polyclonal antibody (AZQ7T3B1) 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 PSMC2 at approximately 49 kDa. The expected band size for PSMC2 is at 49 kDa.

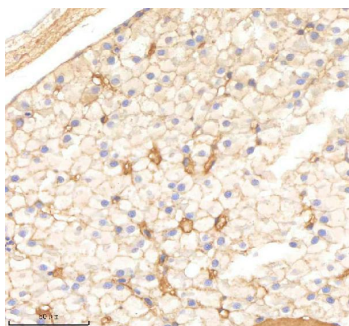


IHC analysis of PSMC2 using anti-PSMC2 antibody (AZQ7T3B1). PSMC2 was detected in a paraffin-embedded section of zebrafish colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC2 Antibody (AZQ7T3B1) 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.

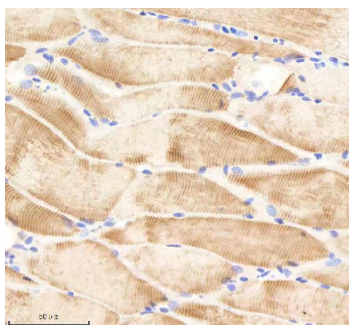


IHC analysis of PSMC2 using anti-PSMC2 antibody (AZQ7T3B1). PSMC2 was detected in a paraffin-embedded section of zebrafish pancreas tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC2 Antibody (AZQ7T3B1) 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.

IHC analysis of PSMC2 using anti-PSMC2 antibody (AZQ7T3B1). PSMC2 was detected in a paraffin-embedded section of zebrafish liver 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-PSMC2 Antibody (AZQ7T3B1) 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.



IHC analysis of PSMC2 using anti-PSMC2 antibody (AZQ7T3B1). PSMC2 was detected in a paraffin-embedded section of zebrafish muscle 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-PSMC2 Antibody (AZQ7T3B1) 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.

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### Anti-Zebrafish PSMC2 Antibody

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