

## Anti-Zebrafish PSMC1a/b Antibody Picoband®

Catalog Number: AZQ7ZWD1

### About PSMC1a/b

26S protease regulatory subunit 4, also known as 26S proteasome AAA-ATPase subunit Rpt2, is an enzyme that in humans is encoded by the PSMC1 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 and a 20S core alpha subunit interact specifically with the hepatitis B virus X protein, a protein critical to viral replication. This subunit also interacts with the adenovirus E1A protein and this interaction alters the activity of the proteasome. Finally, this subunit interacts with ataxin-7, suggesting a role for the proteasome in the development of spinocerebellar ataxia type 7, a progressive neurodegenerative disorder.

### Overview

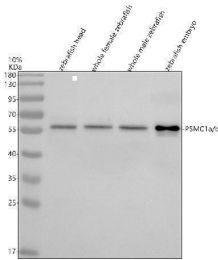
Product Name	Anti-Zebrafish PSMC1a/b Antibody Picoband®
Reactive Species	Zebrafish
Description	Boster Bio Anti-Zebrafish PSMC1a/b Antibody Picoband® catalog # AZQ7ZWD1. Tested in WB, IHC applications. This antibody reacts with Zebrafish. The brand Picoband indicates this is a premium antibody that guarantees 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	Q7ZWD1/Q6IQ72

### Technical Details

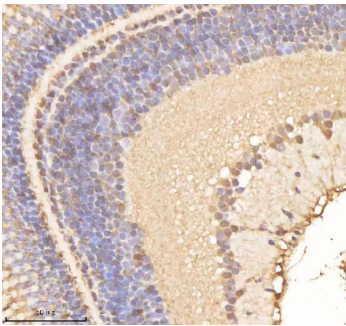
Immunogen	E.coli-derived zebrafish PSMC1a/b recombinant protein (Position: K21-L440).
Form	Lyophilized

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

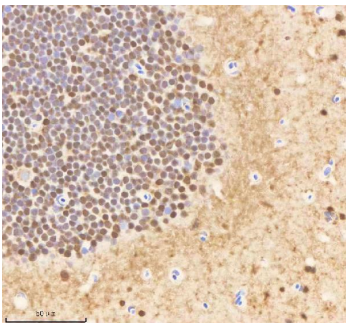
## Anti-Zebrafish PSMC1a/b Antibody Picoband® (AZQ7ZWD1) Images



Western blot analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). 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-PSMC1a/b antigen affinity purified polyclonal antibody (AZQ7ZWD1) 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 PSMC1a/b at approximately 57 kDa. The expected band size for PSMC1a/b is at 49 kDa.

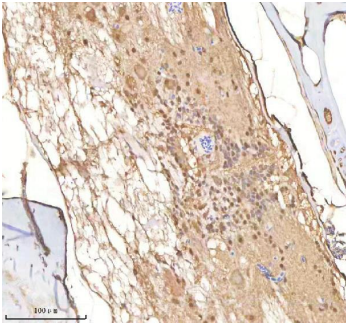


IHC analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish eye tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC1a/b Antibody (AZQ7ZWD1) 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.

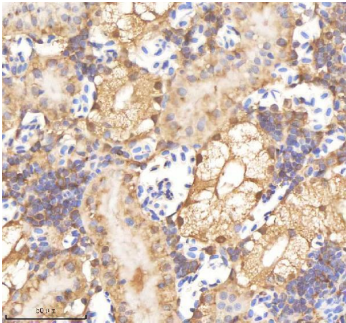


IHC analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC1a/b Antibody (AZQ7ZWD1) 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.

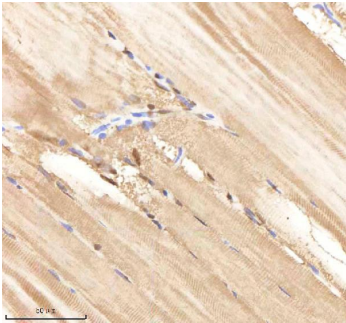
IHC analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish spinal tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0,



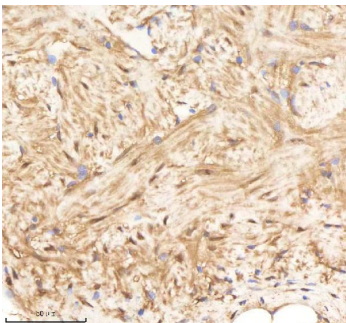
epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC1a/b Antibody (AZQ7ZWD1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish kidney 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-PSMC1a/b Antibody (AZQ7ZWD1) 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.

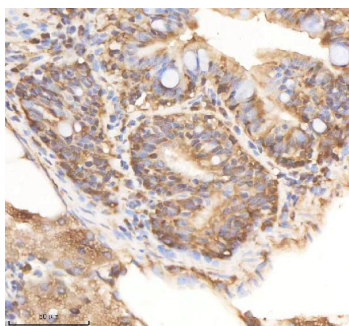


IHC analysis of PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PSMC1a/b Antibody (AZQ7ZWD1) 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 PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b was detected in a paraffin-embedded section of zebrafish heart 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-PSMC1a/b Antibody (AZQ7ZWD1) 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 PSMC1a/b using anti-PSMC1a/b antibody (AZQ7ZWD1). PSMC1a/b 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-PSMC1a/b Antibody (AZQ7ZWD1) 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.

## Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Zebrafish PSMC1a/b Antibody

For Research Use Only. Not for use in diagnostic procedures.