

## Anti-Zebrafish HSP60/HSPD1 Antibody Picoband®

Catalog Number: AZQ803B0

### About HSPD1

HSP60 is a member of the chaperonin class of protein factors, which include the Escherichia coli groEL protein and the Rubisco subunit-binding protein of chloroplasts. It acts as a costimulator of human regulatory CD4-positive/CD25<sup>-</sup>positive T cells, which inhibit lymphoproliferation and IFNG and TNF secretion by CD4-positive and CD8-positive T cells. HSP60 enhances Treg activity via TLR2, leading to activation of an intracellular signaling cascade that included p38, as well as inhibition of ERK phosphorylation. Suppression of target T cells is mediated by both cell-to-cell contact and by secretion of TGFB and IL10, and it leads to downregulation of ERK, NFKB, and TBET expression. The self-molecule HSP60 can downregulate adaptive immune responses by upregulating Tregs through TLR2 signaling.

### Overview

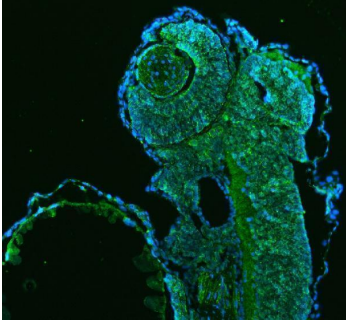
Product Name	Anti-Zebrafish HSP60/HSPD1 Antibody Picoband®
Reactive Species	Zebrafish
Description	Boster Bio Anti-Zebrafish HSP60/HSPD1 Antibody Picoband® catalog #AZQ803B0. Tested in WB, IHC, IF applications. This antibody reacts with Zebrafish. The brand Picoband indicates this is a premium antibody 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	IF, 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	Q803B0

### Technical Details

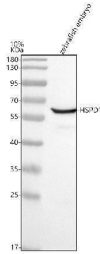
Immunogen	E.coli-derived zebrafish HSP60/HSPD1 recombinant protein (Position: K72-Q496)
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Zebrafish Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Zebrafish

	Immunofluorescence, 5 ug/ml, Zebrafish
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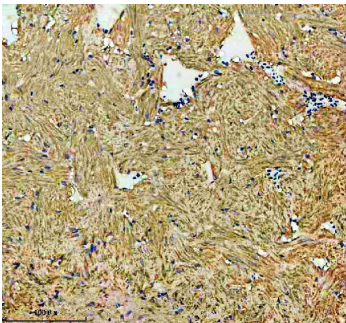
## Anti-Zebrafish HSP60/HSPD1 Antibody Picoband® (AZQ803B0) Images



IF analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). HSP60/HSPD1 was detected in a paraffin-embedded section of zebrafish embryo 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 5 ug/mL rabbit anti-HSP60/HSPD1 Antibody (AZQ803B0) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

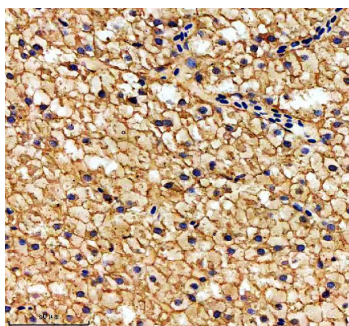


Western blot analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: zebrafish embryo 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-HSP60/HSPD1 antigen affinity purified polyclonal antibody (AZQ803B0) 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 HSP60/HSPD1 at approximately 61 kDa. The expected band size for HSP60/HSPD1 is at 61 kDa.

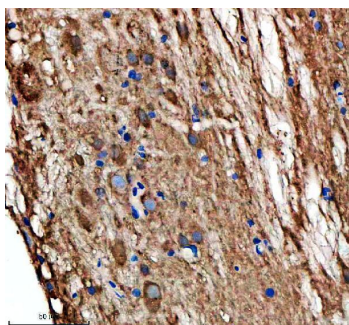


IHC analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). HSP60/HSPD1 was detected in a paraffin-embedded section of zebrafish heart tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HSP60/HSPD1 Antibody (AZQ803B0) 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.

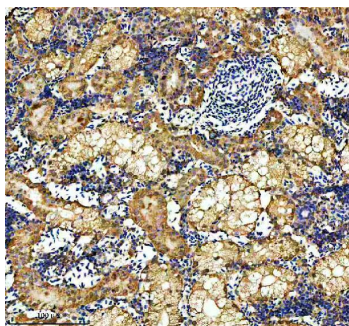
IHC analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). HSP60/HSPD1 was detected in a paraffin-embedded section of zebrafish liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was



blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HSP60/HSPD1 Antibody (AZQ803B0) 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 HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). HSP60/HSPD1 was detected in a paraffin-embedded section of zebrafish spinal cord 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-HSP60/HSPD1 Antibody (AZQ803B0) 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 HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (AZQ803B0). HSP60/HSPD1 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-HSP60/HSPD1 Antibody (AZQ803B0) 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 HSP60/HSPD1 Antibody

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