

Anti-Connexin 45/GJA7/GJC1 Antibody Picoband™

Catalog Number: A08562

About GJC1

Gap junction gamma-1 protein (GJC1), also known as gap junction alpha-7 protein (GJA7) or connexin 45 (Cx45), is a protein that in humans is encoded by the GJC1 gene. The International Radiation Hybrid Mapping Consortium mapped the GJA7 gene to chromosome 17q21.31. This gene is a member of the connexin gene family. The encoded protein is a component of gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight materials from cell to cell.

Overview

Product Name	Anti-Connexin 45/GJA7/GJC1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Connexin 45/GJA7/GJC1 Antibody Picoband™ catalog # A08562. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P36383

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Connexin 45/GJA7, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5ug/ml, Rat, Human

Anti-Connexin 45/GJA7/GJC1 Antibody Picoband™ (A08562) Images

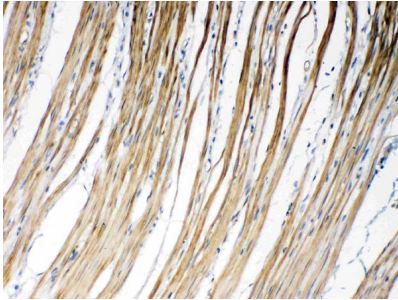


Figure 4. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody (A08562).

Connexin 45/GJA7 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Connexin 45/GJA7 Antibody (A08562) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

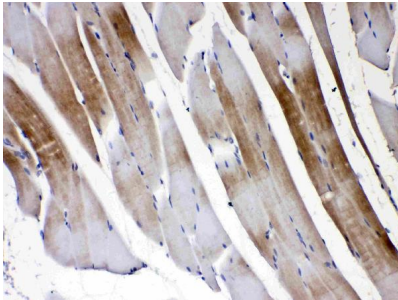


Figure 3. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody (A08562).

Connexin 45/GJA7 was detected in paraffin-embedded section of rat skeletal muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Connexin 45/GJA7 Antibody (A08562) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

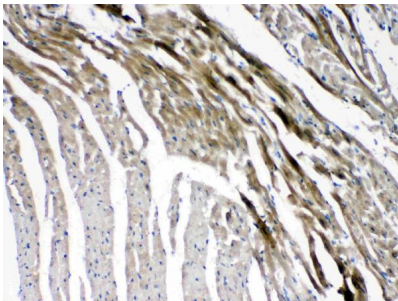


Figure 2. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody (A08562).

Connexin 45/GJA7 was detected in paraffin-embedded section of mouse cardiac muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Connexin 45/GJA7 Antibody (A08562) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

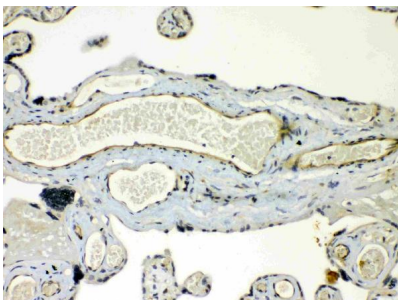


Figure 5. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody (A08562).

Connexin 45/GJA7 was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Connexin 45/GJA7 Antibody (A08562) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated

for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

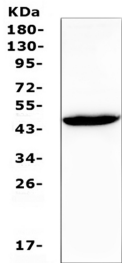


Figure 1. Western blot analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody (A08562). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat testis tissue 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 rabbit anti-Connexin 45/GJA7 antigen affinity purified polyclonal antibody (Catalog # A08562) 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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Connexin 45/GJA7 at approximately 45KD. The expected band size for Connexin 45/GJA7 is at 45KD.

1 Publications Citing This Product

1. PubMed ID: 27575818, Effect of Novel Gasotransmitter hydrogen sulfide on renal fibrosis and connexins expression in diabetic rats

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