

Anti-Connexin 45/GJA7 Picoband Antibody
Catalog # ABO10340**Specification**

Anti-Connexin 45/GJA7 Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P36383
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Gap junction gamma-1 protein(GJC1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Connexin 45/GJA7 Picoband Antibody - Additional Information

Gene ID 10052

Other Names

Gap junction gamma-1 protein, Connexin-45, Cx45, Gap junction alpha-7 protein, GJC1, GJA7

Calculated MW

45470 MW KDa

Application Details

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

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction.

Protein Name

Gap junction gamma-1 protein

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Connexin 45/GJA7 (91-131aa YLGYAIHKIAKMEHGEADKKAARSKPYAMRWKQHRALEETE), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Connexin 45/GJA7 Picoband Antibody - Protein Information

Name GJC1

Synonyms GJA7

Function

One gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell.

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction

Anti-Connexin 45/GJA7 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

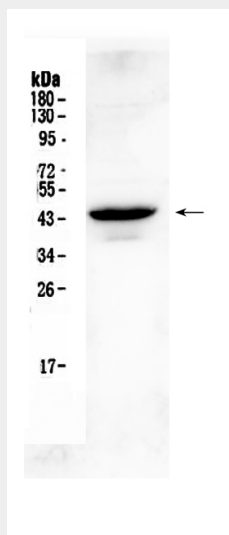
Anti-Connexin 45/GJA7 Picoband Antibody - Images

Figure 1. Western blot analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody (ABO10340). 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 # ABO10340) at 0.5 μ g/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 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.

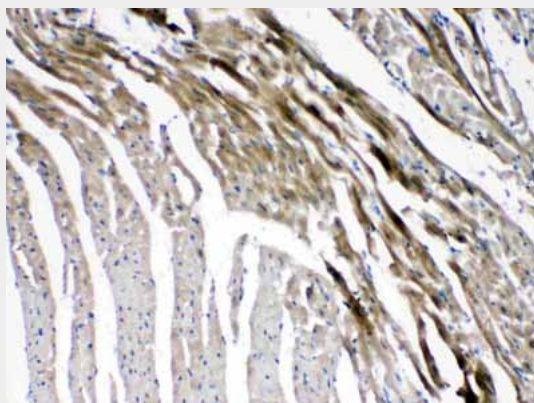


Figure 2. IHC analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody (ABO10340).Connexin 45/GJA7 was detected in paraffin-embedded section of mouse cardiac muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- Connexin 45/GJA7 Antibody (ABO10340) 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) with DAB as the chromogen.

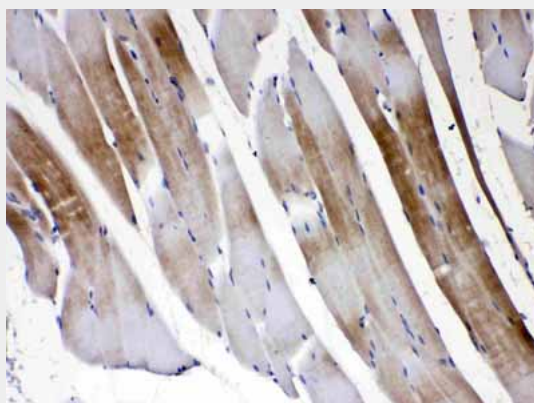


Figure 3. IHC analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody (ABO10340).Connexin 45/GJA7 was detected in paraffin-embedded section of rat skeletal muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- Connexin 45/GJA7 Antibody (ABO10340) 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) with DAB as the chromogen.

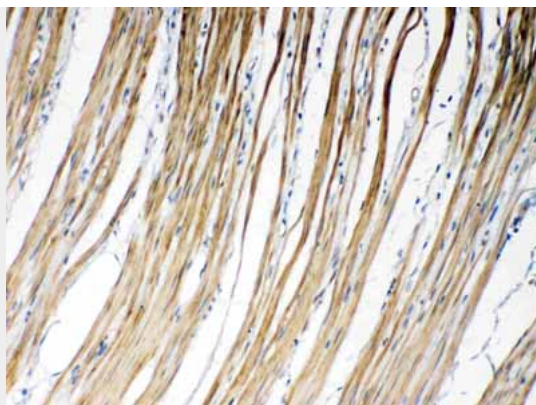


Figure 4. IHC analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody (ABO10340).Connexin 45/GJA7 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- Connexin 45/GJA7 Antibody (ABO10340) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

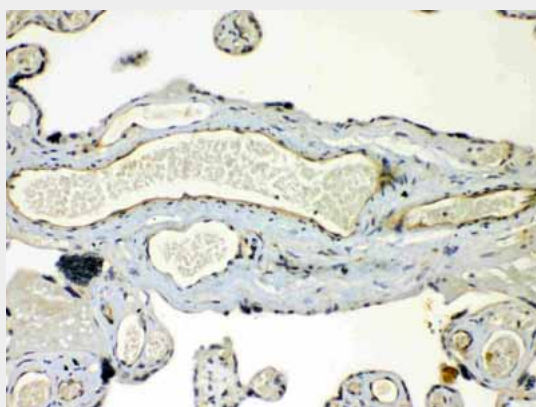


Figure 5. IHC analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody (ABO10340).Connexin 45/GJA7 was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- Connexin 45/GJA7 Antibody (ABO10340) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-Connexin 45/GJA7 Picoband Antibody - Background

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.