Datasheet for ABIN5518838

anti-GJC1 antibody (N-Term)

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Overview

Quantity:	100 µg
Target:	GJC1
Binding Specificity:	AA 91-131, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Gap junction gamma-1 protein(GJC1) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
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.
Sequence:	YLGYAIHKIA KMEHGEADKK AARSKPYAMR WKQHRALEET E
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Gap junction gamma-1 protein(GJC1) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: gap junction protein, gamma 1 Protein Name: Gap junction gamma-1 protein

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	GJC1
Alternative Name:	GJC1 (GJC1 Products)
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. Synonyms: Gap junction gamma-1 protein | Connexin-45 | Cx45 | Gap junction alpha-7 protein | GJC1 | GJA7 | P36383
Gene ID:	10052
UniProt:	P36383
Pathways:	Cell-Cell Junction Organization

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Rat, Predicted Species: Human IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized

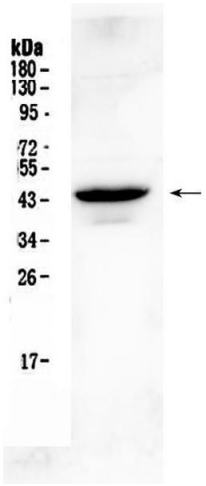
Handling

Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	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.

Publications

Product cited in:	Zhou, Xiong, Huang, Tang, Yu, Lan: "Identification of Genes Associated with Smad3-dependent Renal Injury by RNA-seq-based Transcriptome Analysis." in: **Scientific reports**, Vol. 5, pp. 17901, (2016) (PubMed).

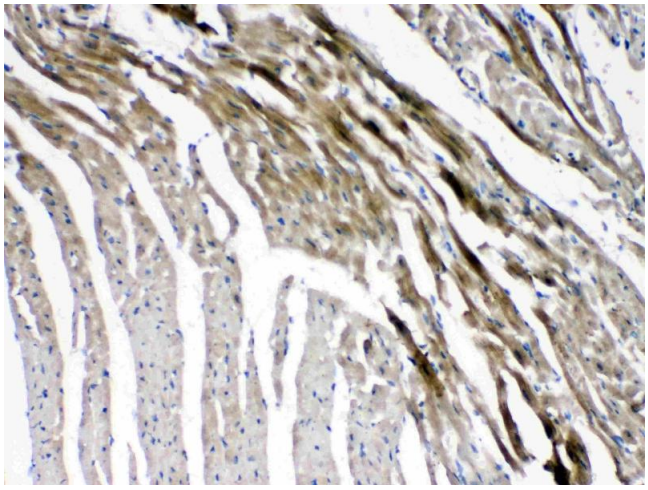
Images



Western Blotting

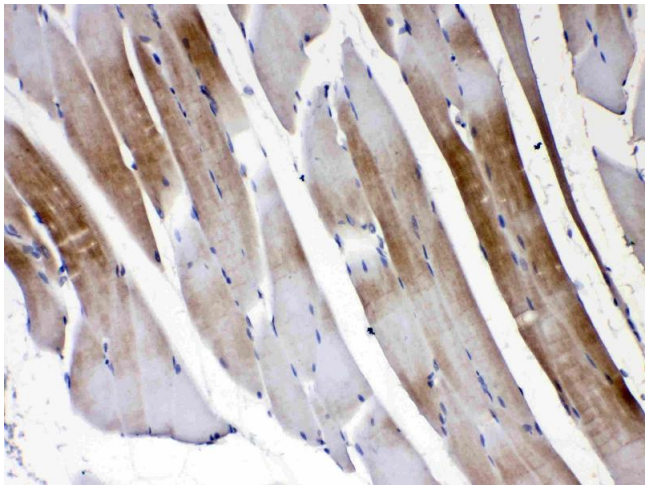
Image 1. Western blot analysis of Connexin 45/GJA7 using anti- Connexin 45/GJA7 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat 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 #) at 0.5 µg/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.



Immunohistochemistry

Image 2. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody . 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 1µg/ml rabbit anti- Connexin 45/GJA7 Antibody 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of Connexin 45/GJA7 using anti-Connexin 45/GJA7 antibody . 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 1µg/ml rabbit anti- Connexin 45/GJA7 Antibody 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Images

Please check the product details page for more images. Overall 5 images are available for ABIN5518838.