

## Basic Information

Product Name	Anti-Connexin 43/GJA1 Antibody	
Gene Name	GJA1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Connexin 43, identical to the related rat and mouse sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	43 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

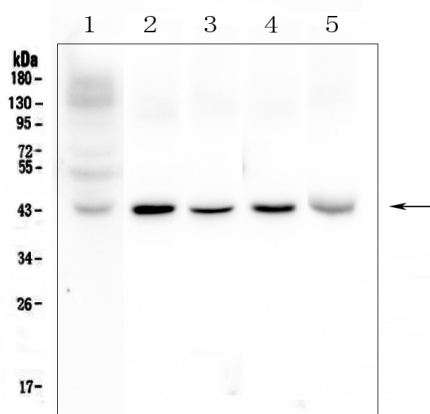
## Background Information

Connexins 43(Cx43), also called GAP Junction Protein, alpha-1(GJA1). Connexin 43 is a member of the connexin gene family which abundantly expressed in the heart and liver and was mapped to 6q21-q23.2. Connexin43, the major protein of gap junctions in the heart, is targeted by several protein kinases that regulate myocardial cell-cell coupling. Mutations in the connexin43 gap-junction gene, which lead to abnormally regulated cell-cell communication, are associated with viscerotrial heterotaxia. Cx43 must also play a critical role in the physiology of hearing, presumably by participating in the recycling of potassium to the cochlear endolymph.

## Reference

Anti-Connexin 43/GJA1 Antibody被引用在14文献中。

## Selected Validation Data



Western blot analysis of Connexin 43/GJA1 using anti-Connexin 43/GJA1 antibody (BA1727). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

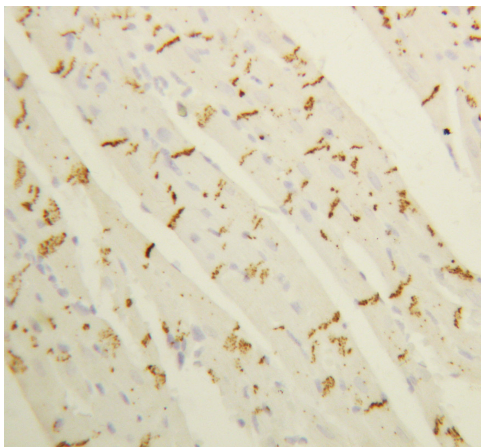
Lane 2: rat brain tissue lysates,

Lane 3: rat heart tissue lysates,

Lane 4: mouse brain tissue lysates,

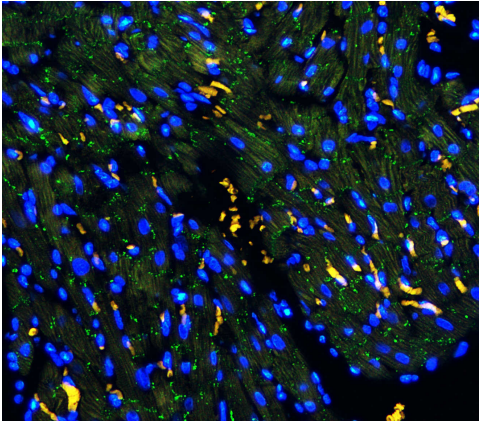
Lane 5: mouse heart tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Connexin 43/GJA1 antigen affinity purified polyclonal antibody (BA1727) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Connexin 43/GJA1 at approximately 43 kDa. The expected band size for Connexin 43/GJA1 is at 43 kDa.



IHC analysis of Connexin 43/GJA1 using anti-Connexin 43/GJA1 antibody (BA1727).

Connexin 43/GJA1 was detected in a paraffin-embedded section of rat cardiac muscle tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Connexin 43/GJA1 Antibody (BA1727) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of Connexin 43/GJA1 using anti- Connexin 43/GJA1 antibody (BA1727).

Connexin 43/GJA1 was detected in paraffin-embedded section of rat heart 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 43/GJA1 Antibody (BA1727) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. . Visualize using a fluorescence microscope and filter sets appropriate for the label used.