

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, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Connexin 43/GJA1 recombinant protein (Position: D3-R362).	
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 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (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.

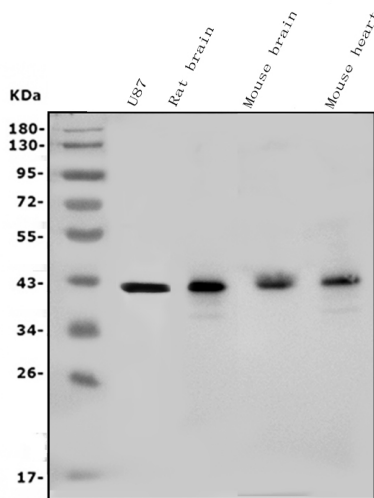
Background Information

Connexin 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 viscerotaxia. 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28文献中。

Selected Validation Data



Western blot analysis of Connexin 43/GJA1 using anti-Connexin 43/GJA1 antibody (A00599). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

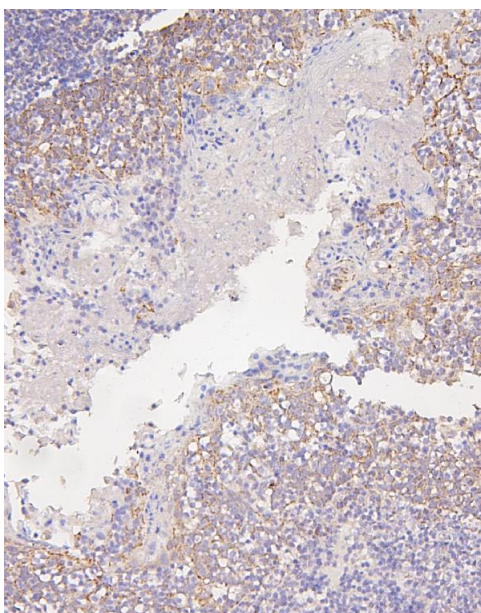
Lane 1: human U-87MG whole cell lysates,

Lane 2: rat brain tissue lysates,

Lane 3: mouse brain tissue lysates,

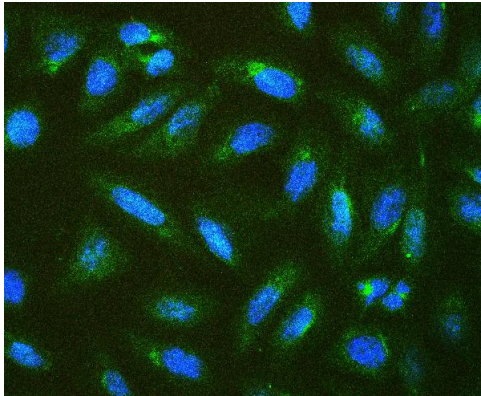
Lane 4: mouse heart tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Connexin 43/GJA1 antigen affinity purified polyclonal antibody (A00599) 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 (A00599).

Connexin 43/GJA1 was detected in a paraffin-embedded section of human tonsil tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Connexin 43/GJA1 Antibody (A00599) 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 GJA1 using anti- GJA1 antibody (A00599).

GJA1 was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.