

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		
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 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		
Observed MW	43 kDa		
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH 6.0, or PH 8.0 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.

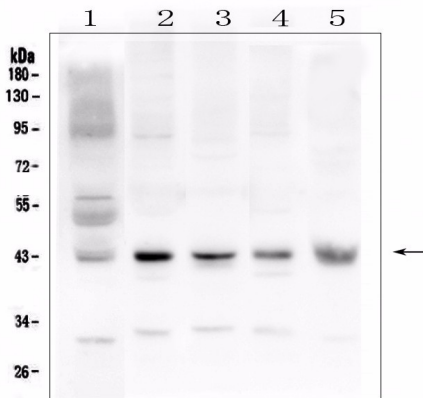
Background Information

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 viscerotaxial 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10文献中。

Selected Validation Data



Western blot analysis of Connexin 43/GJA1 using anti-Connexin 43/GJA1 antibody (PA1026-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

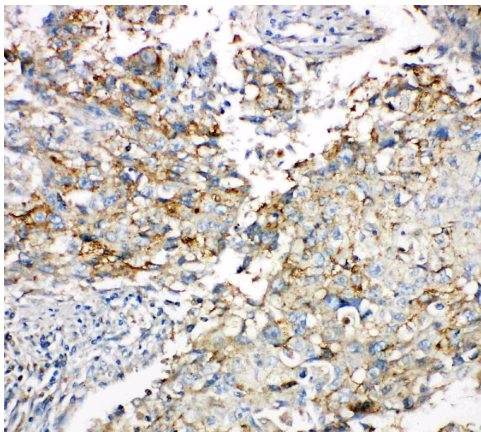
Lane 2: rat brain tissue lysates,

Lane 3: rat hear 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 (PA1026-1) 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 (PA1026-1).

Connexin 43/GJA1 was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Connexin 43/GJA1 Antibody (PA1026-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.