



Rabbit Anti-Connexin 43 antibody

SL0651R

Product Name:	Connexin 43
Chinese Name:	间隙连接蛋白43抗体
Alias:	Connexin 43; connexin43; Connexin43v; Cx 43v; CX43; CX 43; CX-43; DFNB38; Gap junction 43 kDa heart protein;Connexin-43; Gap junction alpha 1 protein; Gap junction protein alpha 1 43kDa (connexin 43); Gap junction protein alpha 1 43kDa; Gap junction protein alpha like; GJA 1; GJA1; GJA-1; GJAL; HGNC:4282; HGNC:8112; Oculodentodigital dysplasia; ODD; ODOD; SDTY3; Syndactyly type III; CXA1 HUMAN.
文献引用 PubMed :	<p>Specific References(2) SL0651R has been referenced in 2 publications.</p> <p>[IF=0.14]Chen WG, Gao ZW, Ni YH, Dai ZX. Carbenoxolone pretreatment and treatment of posttraumatic epilepsy. Neural Regen Res. 2013;8(2):169-176.Rat. PubMed:N/A</p> <p>[IF=5.90]Zhao, Jing, et al. "Chronic obstructive sleep apnea causes atrial remodeling in canines: mechanisms and implications." Basic Research in Cardiology 109.5 (2014): 1-13.WB;Dog. PubMed:25015734</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	42kDa
Cellular localization:	cytoplasmicThe cell membraneExtracellular matrix
Form:	Lyophilized or Liquid

Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Connexin-43:211-260/382 human<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>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. The encoded protein is the major protein of gap junctions in the heart that are thought to have a crucial role in the synchronized contraction of the heart and in embryonic development. A related intronless pseudogene has been mapped to chromosome 5. Mutations in this gene have been associated with oculodentodigital dysplasia and heart malformations. [provided by RefSeq].</p> <p>Function: Gap junction protein that acts as a regulator of bladder capacity. A 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. May play a critical role in the physiology of hearing by participating in the recycling of potassium to the cochlear endolymph. Negative regulator of bladder functional capacity: acts by enhancing intercellular electrical and chemical transmission, thus sensitizing bladder muscles to cholinergic neural stimuli and causing them to contract.</p> <p>Subunit: A connexon is composed of a hexamer of connexins. Interacts (via C-terminus) with TJP1. Interacts (via C-terminus) with SRC (via SH3 domain). Interacts with UBQLN4. Interacts with SGSM3. Interacts with KIAA1432/CIP150. Interacts with CNST and CSNK1D.</p> <p>Subcellular Location: Cell membrane; Multi-pass membrane protein. Cell junction, gap junction.</p> <p>Tissue Specificity: Expressed in the heart and fetal cochlea.</p> <p>Post-translational modifications: Phosphorylated at Ser-368 by PRKCG; phosphorylation induces disassembly of gap junction plaques and inhibition of gap junction activity. Phosphorylation at Ser-325, Ser-328 and Ser-330 by CK1 modulates gap junction assembly.</p>

DISEASE:

Defects in GJA1 are the cause of autosomal dominant oculodentodigital dysplasia (ODDD) [MIM:164200]; also known as oculodentoosseous dysplasia. ODDD is a highly penetrant syndrome presenting with craniofacial (ocular, nasal, dental) and limb dysmorphisms, spastic paraplegia, and neurodegeneration. Craniofacial anomalies typically include a thin nose with hypoplastic alae nasi, small anteverted nares, prominent columnella, and microcephaly. Brittle nails and hair abnormalities of hypotrichosis and slow growth are present. Ocular defects include microphthalmia, microcornea, cataracts, glaucoma, and optic atrophy. Syndactyly type 3 and conductive deafness can occur in some cases. Cardiac abnormalities are observed in rare instances.

Similarity:

Belongs to the connexin family. Alpha-type (group II) subfamily.

SWISS:

P17302

Gene ID:

2697

Database links:

[Entrez Gene: 2697](#)Human

[Entrez Gene: 14609](#)Mouse

[Entrez Gene: 24392](#)Rat

[Omin: 121014](#)Human

[SwissProt: P17302](#)Human

[SwissProt: P23242](#)Mouse

[SwissProt: P08050](#)Rat

[Unigene: 74471](#)Human

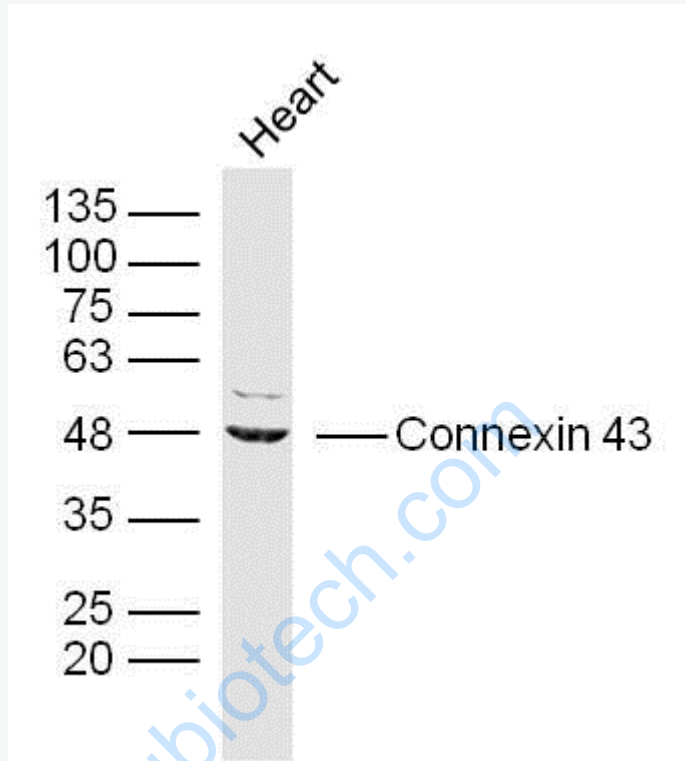
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

间隙连接蛋白-43(Gap junction alpha-1 protein; GJA-1; (Vascular smooth muscle connexin-43))是构成细胞间的通道,小分子成份可以借此在细胞间扩散。Connexin-43也是心肌缝隙连接的主要蛋白之一。

此外, 星形细胞、成纤维细胞、平滑肌和肾等组织也有表达Connexin 43.

Picture:



Sample:

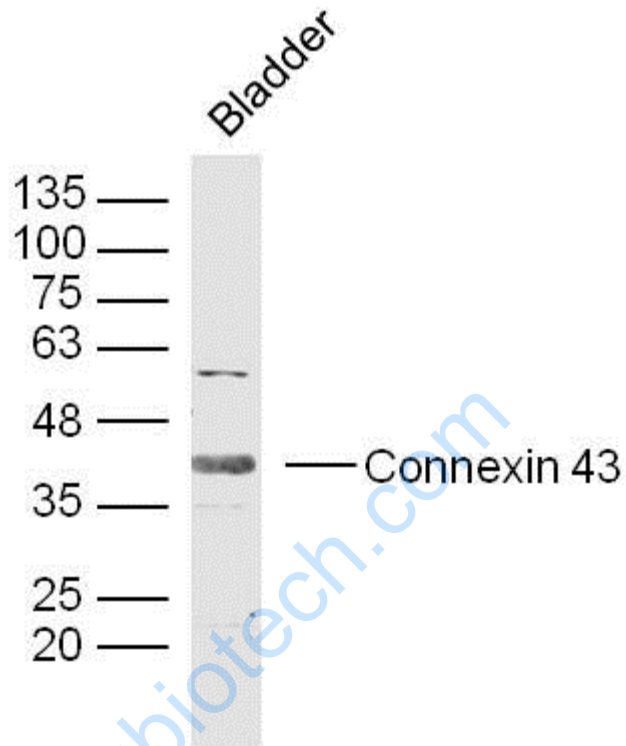
Heart (Mouse) Lysate at 40 ug

Primary: Anti- Connexin 43(SL0651R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 42/48 kD



Sample:

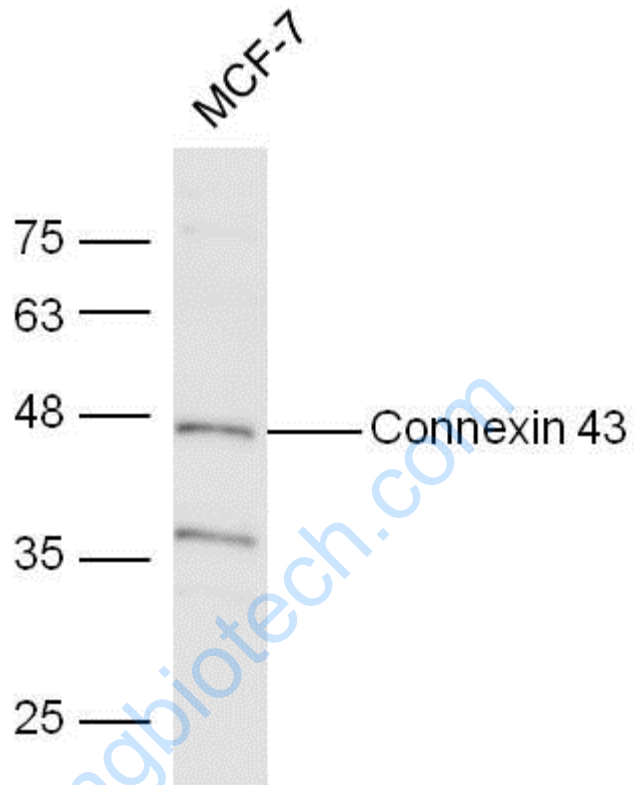
Bladder (Mouse) Lysate at 40 ug

Primary: Anti- Connexin 43(SL0651R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 42/48 kD



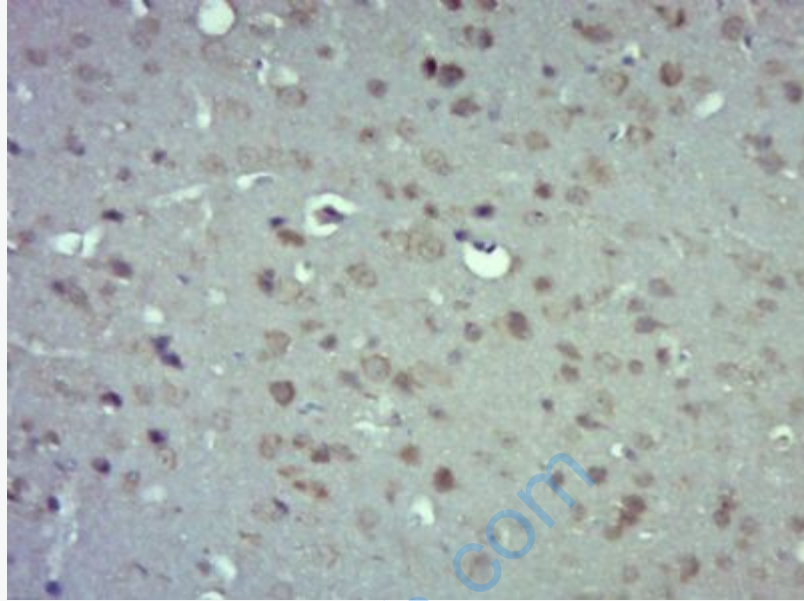
Sample: MCF-7 Cell Lysate at 40 ug

Primary: Anti-Connexin(SL0651R) at 1/300 dilution

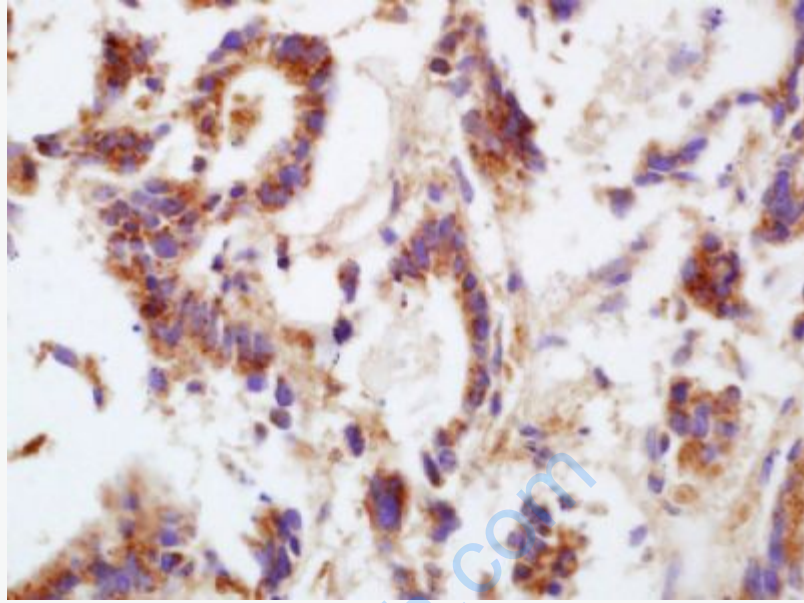
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 42 kD

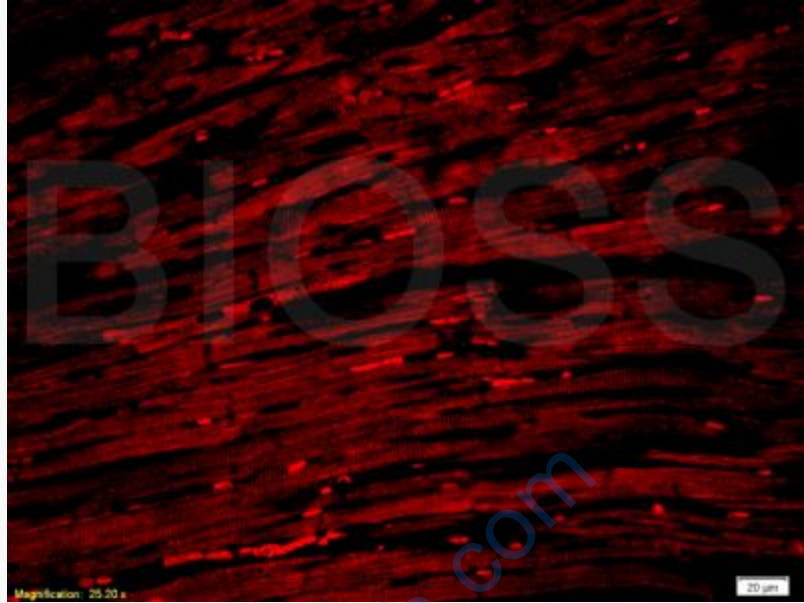
Observed band size: 43 kD



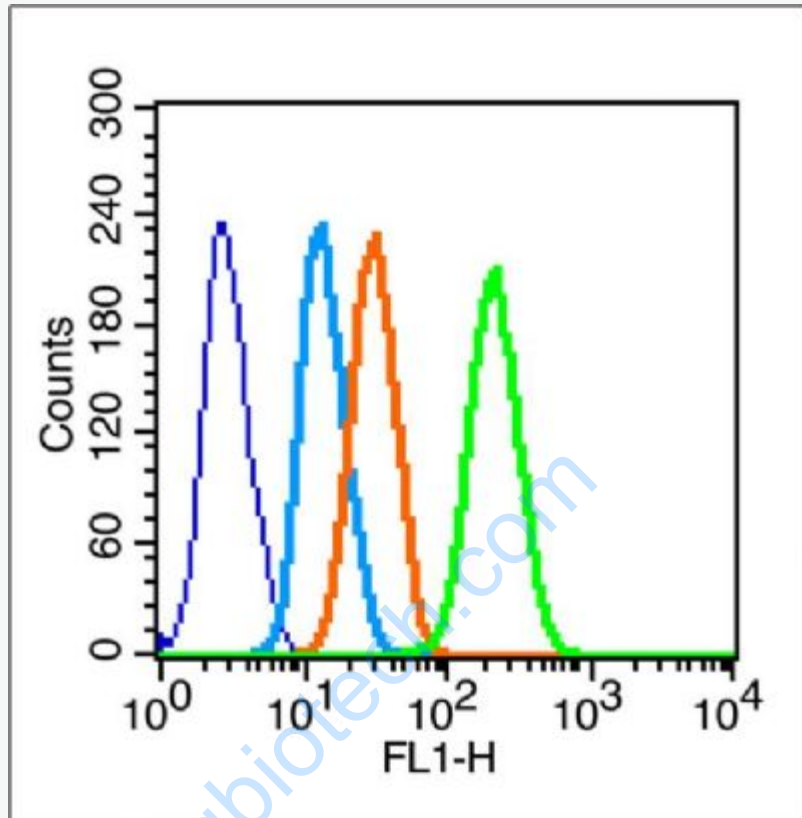
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Connexin 43) Polyclonal Antibody, Unconjugated (SL0651R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human stomach cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Connexin 43) Polyclonal Antibody, Unconjugated (SL0651R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat heart tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Connexin 43 Polyclonal Antibody, Unconjugated(SL0651R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, PE
conjugated(SL0651R)used at 1:200 dilution for 40 minutes at 37°C.



Blank control (blue line):Hela(blue).

Primary Antibody (green line): Rabbit Anti-Connexin 43 antibody(SL0651R)

Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): F(ab')₂ fragment goat anti-rabbit IgG-FITC.

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice.Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the

	<p>antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.</p>
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