



## Rabbit Anti-Connexin 43 antibody

SL8987R

<b>Product Name:</b>	Connexin 43
<b>Chinese Name:</b>	间隙连接蛋白43抗体
<b>Alias:</b>	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.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	42kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Connexin 43:2-100/382<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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].

**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.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction.

**Tissue Specificity:**

Expressed in the heart and fetal cochlea.

**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.

**DISEASE:**

Defects in GJA1 are the cause of autosomal dominant oculodentodigital dysplasia (ODDD) [MIM:164200]; also known as oculodentosseous 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: 281193](#)Cow

[Entrez Gene: 403418](#)Dog

[Entrez Gene: 14609](#)Mouse

[Entrez Gene: 24392](#)Rat

[Omim: 121014](#)Human

[SwissProt: P18246](#)Cow

[SwissProt: Q6S9C0](#)Dog

[SwissProt: P17302](#)Human

[SwissProt: P23242](#)Mouse

[SwissProt: Q6TYA7](#)Rabbit

[SwissProt: P08050](#)Rat

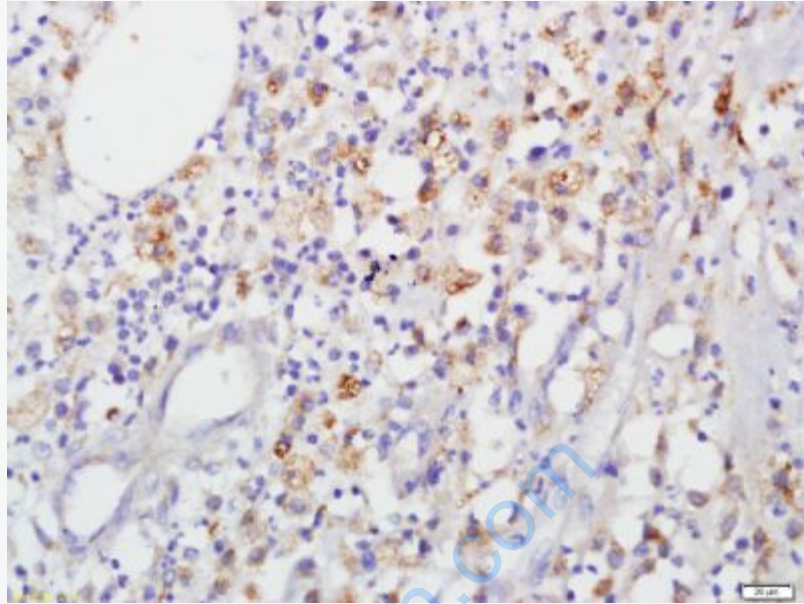
[Unigene: 74471](#)Human

[Unigene: 378921](#)Mouse

[Unigene: 10346](#)Rat

**Important Note:**

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

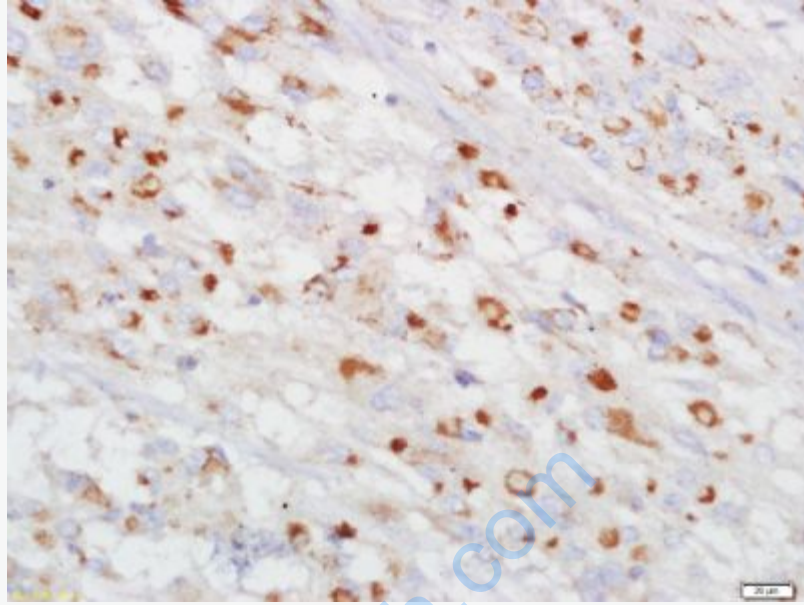


**Picture:**

Tissue/cell: human cervix carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

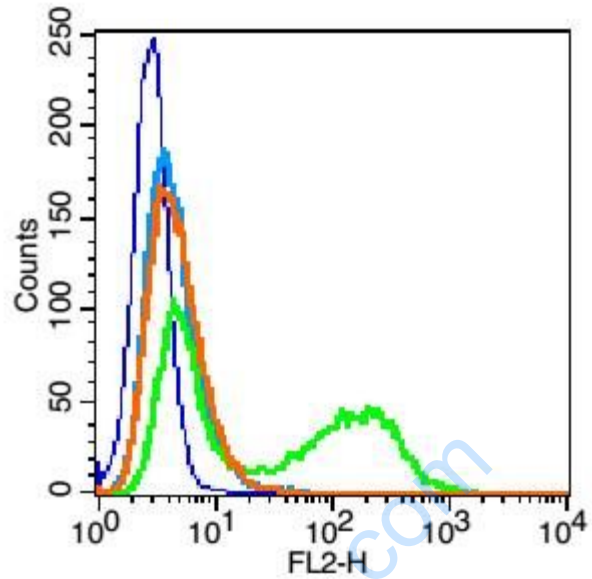
Incubation: Anti- Connexin 43 Polyclonal Antibody, Unconjugated(SL8987R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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Blank control(blue): HUVEC cells(fixed with 2% paraformaldehyde (10 min) ).

Primary Antibody:Rabbit Anti-Connexin 43 antibody(SL8987R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.