

Rabbit Connexin 43 Polyclonal Antibody | anti-CX43 antibody

Connexin 43 Antibody

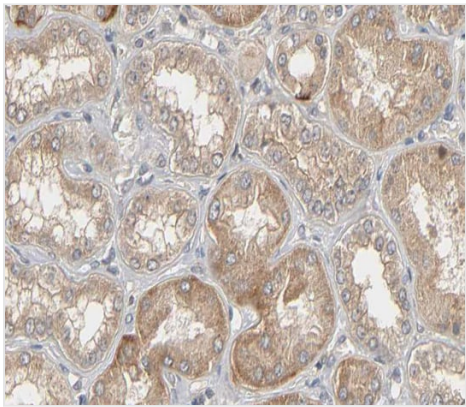
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320784	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

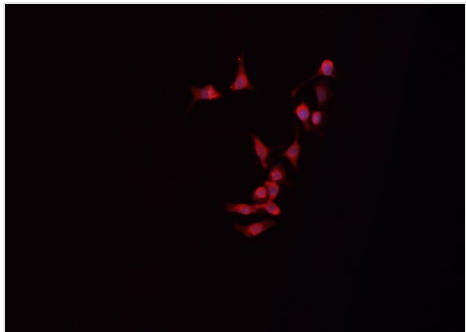
Connexin 43; Polyclonal Antibody; Connexin 43 Antibody; Connexin-43; Cx 43; CXA1_HUMAN; DFNB38; Gap junction 43 kDa heart protein; Gap junction alpha-1 protein; Gap junction protein alpha 1 43kDa (connexin 43); Gap junction protein alpha 1 43kDa; Gap junction protein alpha like; GJA 1; Gja1; GJAL; ODD; ODDD; ODOO; SDTY3; anti-CX43 antibody

PRODUCT SPECIFICATIONS

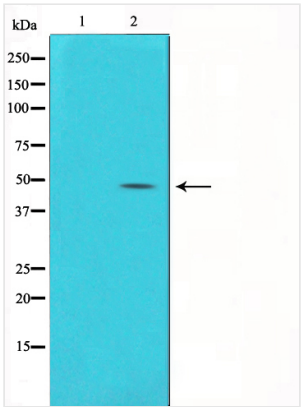
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Connexin 43 antibody detects endogenous levels of total Connexin 43
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	382
Applicable Applications for anti-CX43 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Connexin 43
Subcellular Location	Cell Membrane. Cell Junction > Gap Junction.
Tissue Specificity	Expressed in the heart and fetal cochlea.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemisry)
AAA320784 at 1/200 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)
AAA320784 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)
Western blot analysis on HuvEc cell lysate using Connexin 43 Antibody, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CX43 antibody	Description: Cx43 an integral membrane protein of the connexin family, alpha-type (group II) subfamily. Hexamers of connexin-43 form connexons, which aggregate together to form gap junctions, 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. 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 (By similarity). May play a role in cell growth inhibition through the regulation of NOV expression and localization. Plays an essential role in gap junction communication in the ventricles (By similarity). Subunit Structure: A connexon is composed of a hexamer of connexins. Interacts (via C-terminus) with TJP1 (By similarity). Interacts (via C-terminus) with SRC (via SH3 domain) (By similarity). Interacts (not ubiquitinated) with UBQLN4 (via UBA domain) (By similarity). Interacts with SGSM3 and CNST (By similarity). Interacts with RIC1/CIP150. Interacts with CSNK1D. Interacts with NOV (PubMed:15181016, PubMed:15213231). Interacts with TMEM65 (By similarity). Post-translational Modifications: Phosphorylated at Ser-368 by PRKCG; phosphorylation induces disassembly of gap junction plaques and inhibition of gap junction activity (By similarity). Phosphorylation at Ser-325, Ser-328 and Ser-330 by CK1 modulates gap junction assembly. Phosphorylation at Ser-368 by PRKCD triggers its internalization into small vesicles leading to proteasome-mediated degradation (By similarity). Sumoylated with SUMO1, SUMO2 and SUMO3, which may regulate the level of functional Cx43 gap junctions at the plasma membrane. May be desumoylated by SENP1 or SENP2. S-nitrosylation at Cys-271 is enriched at the muscle endothelial gap junction in arteries, it augments channel permeability and may regulate of smooth muscle cell to endothelial cell communication. Similarity: Belongs to the connexin family. Alpha-type (group II) subfamily.
References	Zhao J, Wu M, Chen S, Ji Z, Zheng X; Journal: Neurourol Urodyn. TGF-beta1 and connexin-43 expression in neurogenic bladder from rats with sacral spinal cord injury.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504001
NCBI GeneID	2697
NCBI Accession #	NP_000156.1
NCBI GenBank Nucleotide #	NM_000165.5
UniProt Accession #	P17302; Q6FHU1; Q9Y5I8; B2R5U9
Molecular Weight	Observed: 43 kDa Predicted: 44 kDa
NCBI Official Full Name	gap junction alpha-1 protein
NCBI Official Synonym Full Names	gap junction protein alpha 1
NCBI Official Symbol	GJA1
NCBI Official Synonym Symbols	HSS; CMDR; CX43; EKVP; GJAL; ODDD; AVSD3; EKVP3; HLHS1; PPKCA
NCBI Protein Information	gap junction alpha-1 protein
UniProt Protein Name	Gap junction alpha-1 protein
UniProt Gene Name	GJA1
UniProt Synonym Gene Names	GJAL; Cx43

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.