ARG64928
anti-Connexin 43 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes Connexin 43
Tested Reactivity	Hu, Rat
Predict Reactivity	Dog, Pig
Tested Application	WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Connexin 43
Species	Human
Immunogen	C-QPFDFPDDNQNSKK
Conjugation	Un-conjugated
Alternate Names	Gap junction 43 kDa heart protein; CX43; PPKCA; CMDR; Gap junction alpha-1 protein; HSS; AVSD3; Connexin-43; HLHS1; EKVP; GJAL; ODDD; Cx43

Application Instructions

Application table

Application	Dilution
WB	0.1 - 1 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

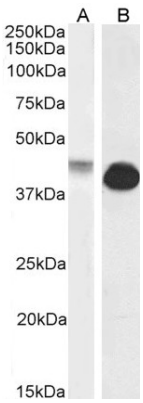
Bioinformation

Database links	GeneID: 24392 Rat GeneID: 2697 Human Swiss-port # P08050 Rat Swiss-port # P17302 Human
Background	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, Jul 2008]
Research Area	Cell Biology and Cellular Response antibody; Signaling Transduction antibody; Cardiomyocyte Cell Surface Marker antibody
Calculated Mw	43 kDa
PTM	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.

Images

ARG64928 anti-Connexin 43 antibody WB image

Western blot: Rat Brain lysate (35 µg protein in RIPA buffer) stained with ARG64928 anti-Connexin 43 antibody at 0.3 µg/ml dilution.



ARG64928 anti-Connexin 43 antibody WB image

Western blot: 35 µg of Human (A) and Rat (B) heart lysates (in RIPA buffer) stained with ARG64928 anti-Connexin 43 antibody at 0.1 µg/ml (A) and 1 µg/ml (B) dilutions and incubated at RT for 1 hour.