

ARG66599 anti-Connexin 43 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Connexin 43
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Connexin 43
Species	Human
Immunogen	KLH-conjugated synthetic peptide within the C-terminal region of Human Connexin 43.
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
	ICC/IF	1:100 - 1:500
	IHC-P	1:100 - 1:200
	WB	1:500 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Sodium citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	44 kDa	

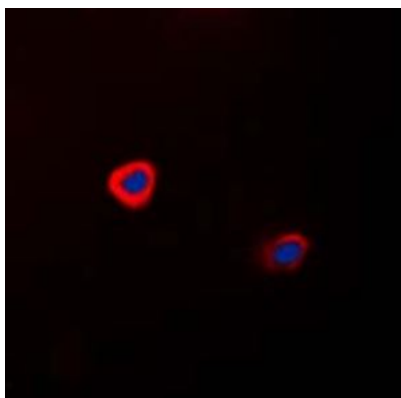
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.42% Potassium phosphate (pH 7.3), 0.87% NaCl, 0.01% Sodium azide and 30% Glycerol.
Preservative	0.01% Sodium azide
Stabilizer	30% Glycerol
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. 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.

Bioinformation

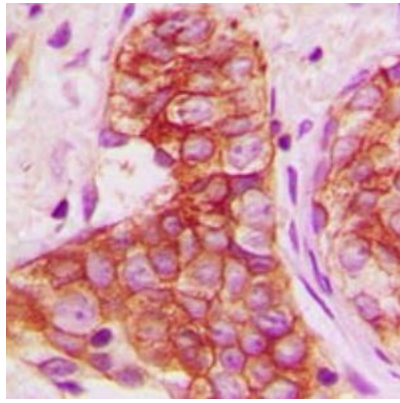
Gene Symbol	GJA1
Gene Full Name	gap junction protein, alpha 1, 43kDa
Background	This gene is a member of the connexin gene family. The encoded protein is a component of gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight 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, autosomal recessive craniometaphyseal dysplasia and heart malformations. [provided by RefSeq, May 2014]
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). [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Signaling Transduction antibody; Cardiomyocyte Cell Surface Marker antibody
Calculated Mw	43 kDa
Cellular Localization	Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Endoplasmic reticulum. Note=Localizes at the intercalated disk (ICD) in cardiomyocytes and the proper localization at ICD is dependent on TMEM65. [UniProt]

Images



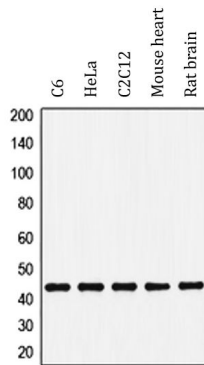
ARG66599 anti-Connexin 43 antibody ICC/IF image

Immunofluorescence: Formalin-fixed HeLa cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were stained with ARG66599 anti-Connexin 43 antibody (red) in 3% BSA-PBS and incubated overnight at 4°C. DAPI (blue) for nuclear staining.



ARG66599 anti-Connexin 43 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human breast cancer tissue. Antigen Retrieval: Heat mediation was performed in Sodium citrate buffer (pH 6.0). The section was then stained with ARG66599 anti-Connexin 43 antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



ARG66599 anti-Connexin 43 antibody WB image

Western blot: C6, HeLa, C2C12, Mouse heart and Rat brain whole cell lysates stained with ARG66599 anti-Connexin 43 antibody.