

ARG51744 anti-Connexin 43 phospho (Ser367) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Connexin 43 phospho (Ser367)
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Connexin 43
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 367 (R-A-S(p)-S-R) derived from 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
	IHC-Fr	Assay dependent
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000

Application Note IHC-Fr: Refer to the reference: [PMID: 35110506](https://pubmed.ncbi.nlm.nih.gov/35110506/) for the detailed protocol.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 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. 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

Gene Symbol GJA1

Gene Full Name gap junction protein, alpha 1, 43kDa

Background One 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.

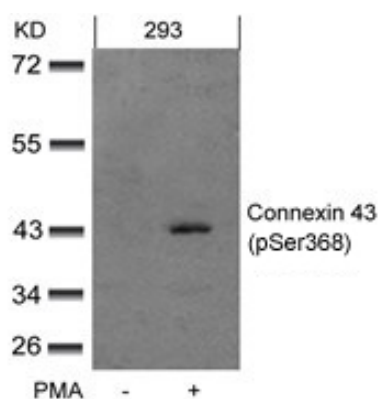
Function Gap junction protein that acts as a regulator of bladder capacity. A gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. May play a critical role in the physiology 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

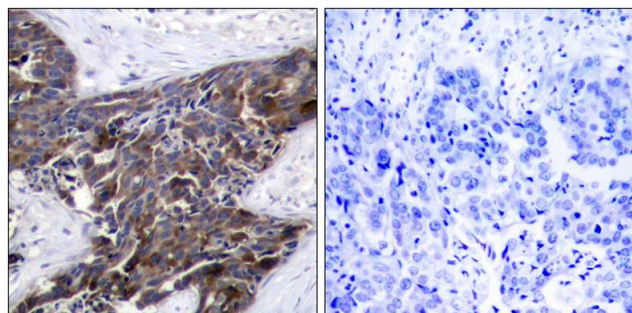
PTM Phosphorylated at Ser-368 by PRKCG; phosphorylation induces disassembly of gap junction plaques and inhibition of gap junction activity (By similarity). Phosphorylation at Ser-325, Ser-328 and Ser-330 by CK1 modulates gap junction assembly. Phosphorylation at Ser-368 by PRKCD triggers its internalization 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



ARG51744 anti-Connexin 43 phospho (Ser367) antibody WB image

Western blot: Extracts from 293 cells untreated or treated with PMA stained with ARG51744 anti-Connexin 43 phospho (Ser367) antibody.



ARG51744 anti-Connexin 43 phospho (Ser367) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51744 anti-Connexin 43 phospho (Ser367) antibody (left) or the same antibody preincubated with blocking peptide (right).