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Goat Anti-Connexin 43 / GJA1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1266a

Specification

Goat Anti-Connexin 43 / GJA1 Antibody - Product Information

Application	**WB**
Primary Accession	P17302
Other Accession	NP_000156, 2697, 24392 (rat)
Reactivity	**Rat**
Predicted	**Human, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**43008**

Goat Anti-Connexin 43 / GJA1 Antibody - Additional Information

Gene ID 2697

Other Names
Gap junction alpha-1 protein, Connexin-43, Cx43, Gap junction 43 kDa heart protein, GJA1, GJAL

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Connexin 43 / GJA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Connexin 43 / GJA1 Antibody - Protein Information

Name GJA1

Synonyms GJAL

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).

Cellular Location
Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Endoplasmic reticulum {ECO:0000250|UniProtKB:P23242}. Note=Localizes at the intercalated disk (ICD) in cardiomyocytes and the proper localization at ICD is dependent on TMEM65. {ECO:0000250|UniProtKB:P23242}

Tissue Location
Expressed in the heart and fetal cochlea.

Goat Anti-Connexin 43 / GJA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Connexin 43 / GJA1 Antibody - Images

AF1266a (0.3 µg/ml) staining of Rat Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Connexin 43 / GJA1 Antibody - 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.

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Connexin 43, E-cadherin, beta-catenin and ZO-1 expression, and aberrant methylation of the connexin 43 gene in NSCLC. Jinn Y, et al. Anticancer Res, 2010 Jun. PMID 20651379.
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