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GJA1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21800b

Product Information

Application	WB, E
Primary Accession	P17302
Reactivity	Human
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53888
Calculated MW	43008

Additional Information

Gene ID	2697
Other Names	Gap junction alpha-1 protein, Connexin-43, Cx43, Gap junction 43 kDa heart protein, GJA1, GJAL
Target/Specificity	This GJA1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 316-346 amino acids from human GJA1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GJA1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GJA1
Synonyms	GJAL
Function	Structural component of the gap junction, a specialized intercellular structure consisting of a cluster of closely packed pairs of transmembrane

	channels, the connexons, that allow passage of small molecules and electrical signals between neighboring cells (By similarity). Forms homotypic and heterotypic channels gated by transjunctional voltage (By similarity). May play a critical role in the physiology of hearing by participating in the recycling of potassium to the cochlear endolymph (Probable). 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 the conductive system of ventricular myocardium and heart morphogenesis (By similarity). May play a role in cell growth inhibition through the regulation of NOV expression and localization (By similarity). Involved in intercellular innate immune signaling (PubMed:24077100, PubMed:31992625, PubMed:40010341). Mediates translocation of 2',3'-cGAMP and 2',5'-oligoadenylates (2-5A) second messengers from virus-infected cells to macrophages and uninfected neighboring cells to propagate and amplify the antiviral immune response (PubMed:24077100, PubMed:31992625, PubMed:40010341).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Endoplasmic reticulum {ECO:0000250|UniProtKB:P23242}. Cell junction Note=Localizes at the intercalated disk (ICD) between two adjacent cardiomyocytes and the proper localization at ICD is dependent on TMEM65. {ECO:0000250|UniProtKB:P23242}
Tissue Location	Expressed at intercalated disks in the heart (at protein level) (PubMed:11741837, PubMed:18662195, PubMed:38375917) Expressed in the fetal cochlea (PubMed:11741837). Expressed by keratinocytes in the skin (at protein level) (PubMed:26604139)

Background

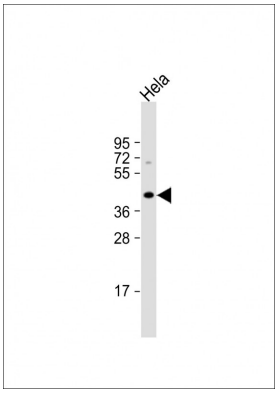
Gap junction protein that acts as a regulator of bladder capacity. A gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. May play a critical role in the physiology of hearing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

References

Fishman G.I.,et al.J. Cell Biol. 111:589-598(1990).
Fishman G.I.,et al.Genomics 10:250-256(1991).
Haefliger J.-A.,et al.Eur. Heart J. 20:1843-1843(1999).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images

Anti-GJA1 Antibody (C-Term) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.