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Product datasheet for TA328600

GJA1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)HAQPFDFPDDNQNSK, corresponding to amino acids residues 331-345 of human Connexin-43. Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	gap junction protein alpha 1
Database Link:	NP_000156 Entrez Gene 14609 MouseEntrez Gene 24392 Rat P17302

View online »

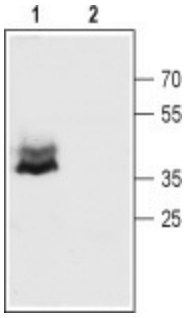
Background: Connexins (Cx) are integral membrane proteins consisting of four transmembrane domains, two extracellular loops, one intracellular loop and intracellular N- and C-termini. The 21 members belonging to this family form homomeric or heteromeric hexamers generally termed connexons or hemi-channels. In turn, these hemi-channels further assemble in a head-to-head manner, thus forming gap junction channels. Connexins are ubiquitously expressed and their activity is regulated at the expression level and by post-translational modifications. For example, Connexin-43 (Cx43) protein level is regulated by its turnover rate and by phosphorylation of various residues which ultimately determines its activity rate. Gap junctions are usually found in clusters and enable intercellular communication by allowing the passage of small molecules between cells. They play important roles in different biological processes. These include differentiation, cell cycle synchronization, cellular development, neuronal activity and the immune response. Due to their important roles, mutations in connexins are linked with a number of diseases such as neurodegenerative disorders, skin diseases, deafness, and developmental abnormalities.

Synonyms: AVSD3; CMDR; CX43; EKVP; GJAL; HLHS1; HSS; ODDD; PPKCA

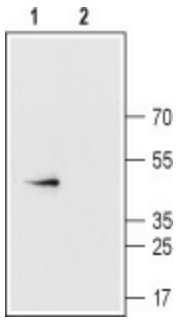
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Gap junction

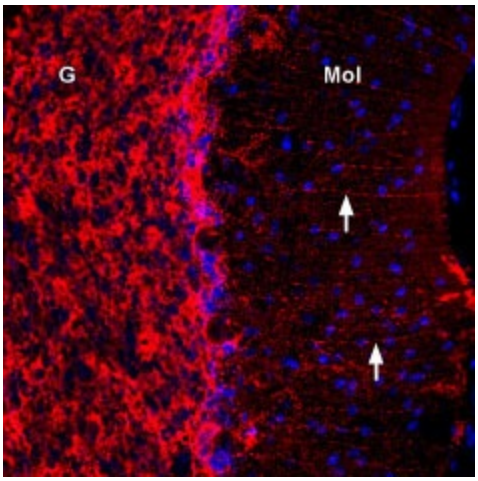
Product images:



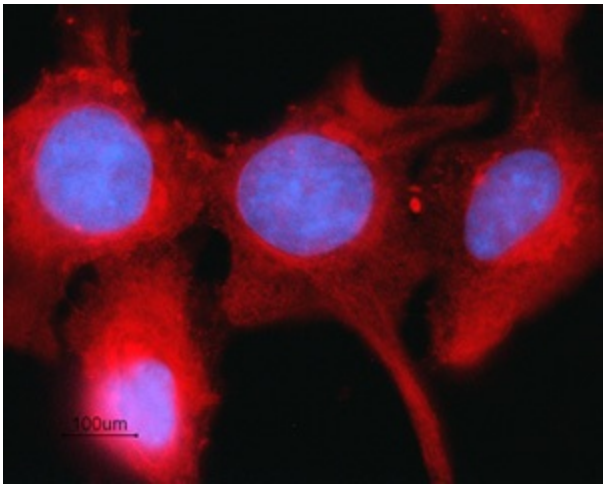
Western blot analysis of mouse brain membranes: 1. Anti-Connexin-43 antibody (1:400). 2. Anti-Connexin-43 antibody, preincubated with the control peptide antigen.



Western blot analysis of rat heart membranes: 1. Anti-Connexin-43 antibody (1:400). 2. Anti-Connexin-43 antibody, preincubated with the control peptide antigen.



Expression of Connexin-43 in rat cerebellum. Immunohistochemical staining of immersion-fixed, free floating rat brain frozen sections using Anti-Connexin-43 antibody (1:300). Connexin-43 staining (red) appeared in Bergmann glial fibers (arrows) in the molecular layer (MOL) and in the granule layer (G). Cell nuclei were stained with DAPI (Blue).



Expression of Connexin-43 in rat intestinal epithelial IEC-6 cells. Immunocytochemical staining of fixed and permeabilized rat intestinal epithelial IEC-6 cells. Cells were stained with Anti-Connexin-43 antibody (1:200), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). Cell nuclei were visualized using Hoechst 33342 (blue).