

## Product datasheet for **AP20736PU-S**

### GJA1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500 - 1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Connexin 43 protein. (region surrounding Arg361)
Formulation:	Phosphate buffered saline (PBS), pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 43 kDa
Gene Name:	gap junction protein alpha 1
Database Link:	<a href="#">Entrez Gene 14609 Mouse</a> <a href="#">Entrez Gene 24392 Rat</a> <a href="#">Entrez Gene 2697 Human P17302</a>



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**Background:**

The connexins are a group of gap junction proteins which form a hexamer to compose a connexon. Clusters of connexons form a gap junction through which low molecular weight proteins may diffuse from cell to cell. Several mammalian cells with malignant phenotypes exhibit decreased connexin expression and gap junction communication. In Src transformed cells, there is a decrease in gap junctional communication, which appears to be associated with tyrosine phosphorylation of connexin 43. Activated c-Src phosphorylates the C-terminal tail of connexin 43 on Tyr 265, resulting in a stable interaction between both proteins, which leads to inhibition of gap junctional communication. In addition to tyrosine phosphorylation, connexin 43 has also been shown to be phosphorylated on serine in the absence of Src kinases and on both serine and tyrosine in cells expressing Src kinases, such as c-Src and/or pp60v-Src. In human vascular endothelial cells, connexin 43 is posttranslationally modified during mitosis. Mitosis-specific phosphorylation of connexin 43 correlates with the transient loss of gap junction intercellular communication and redistribution of connexin 43.

**Synonyms:**

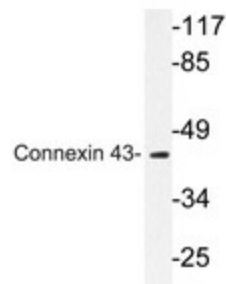
Gap junction alpha-1 protein, Connexin-43, GJAL

**Protein Families:**

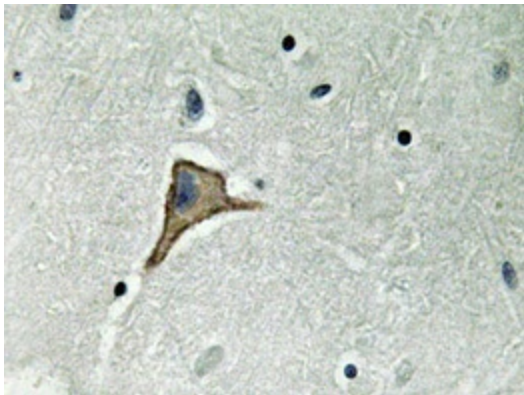
Druggable Genome, Ion Channels: Other, Transmembrane

**Protein Pathways:**

Arrhythmogenic right ventricular cardiomyopathy (ARVC), Gap junction

**Product images:**

Western blot analyzes of Connexin 43 antibody (Cat.-No.: [AP20736PU-N]) in extracts from mouse heart cells.



Immunohistochemistry analyzes of Connexin 43 antibody (Cat.-No.: [AP20736PU-N]) in paraffin-embedded human brain tissue.