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Datasheet for ABIN967718

anti-Connexin 43/GJA1 antibody (AA 252-270)

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Overview

Quantity:	150 µg
Target:	Connexin 43/GJA1 (GJA1)
Binding Specificity:	AA 252-270
Reactivity:	Human, Rat, Mouse, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Connexin 43/GJA1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

Product Details

Immunogen:	Rat Connexin-43 aa. 252-270
Clone:	2-Connexin
Isotype:	IgG1
Cross-Reactivity:	Chicken, Dog (Canine), Human, Mouse (Murine)
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

Product Details

Purification: The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target: Connexin 43/GJA1 (GJA1)

Alternative Name: Connexin-43 ([GJA1 Products](#))

Background: Gap junctions are intercellular protein pores. They enable cell-to-cell communication by allowing passage of ions and other small molecules. The subunits of gap junction channels are assembled from a family of proteins called connexins. Individual connexin molecules join to make hexameric hemichannels termed connexons, these structures dock to connexons on neighboring cells, forming gap junction pores. Connexin-43 is a member of the connexin family possessing four transmembrane regions, with cytoplasmic amino and carboxyl terminals. It undergoes rapid turnover in the cell and its monomers may reside in the ER/Golgi network, forming a reservoir available for assembly upon degradation of existing connexin-43 channels. In addition, it is believed that phosphorylation of connexin-43 plays a regulatory role both in the assembly of connexons and in gating activity at the gap junction. This antibody is routinely tested by western blot analysis.

Molecular Weight: 43 kDa

Pathways: [MAPK Signaling](#), [Myometrial Relaxation and Contraction](#), [Cell-Cell Junction Organization](#)

Application Details

Comment: Related Products: ABIN968545, ABIN967389

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 250 µg/mL

Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: -20 °C

Storage Comment: Store undiluted at -20° C.

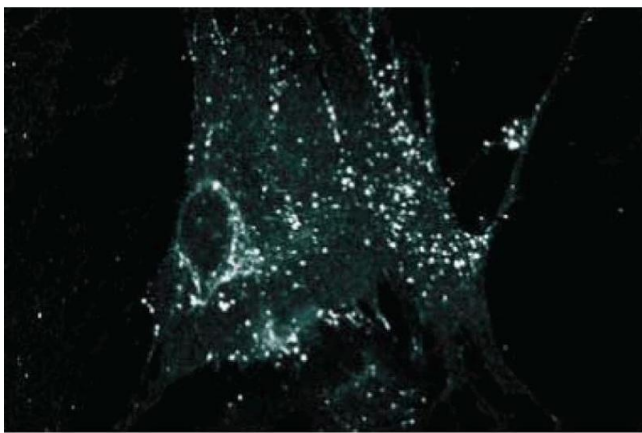
Publications

- Product cited in:
- Giepmans, Hengeveld, Postma, Moolenaar: "Interaction of c-Src with gap junction protein connexin-43. Role in the regulation of cell-cell communication." in: **The Journal of biological chemistry**, Vol. 276, Issue 11, pp. 8544-9, (2001) ([PubMed](#)).
- Toyofuku, Akamatsu, Zhang, Kuzuya, Tada, Hori: "c-Src regulates the interaction between connexin-43 and ZO-1 in cardiac myocytes." in: **The Journal of biological chemistry**, Vol. 276, Issue 3, pp. 1780-8, (2001) ([PubMed](#)).
- Lucke, Choudhry, Thom, Selmer, Burden, Hodgins: "Upregulation of connexin 26 is a feature of keratinocyte differentiation in hyperproliferative epidermis, vaginal epithelium, and buccal epithelium." in: **The Journal of investigative dermatology**, Vol. 112, Issue 3, pp. 354-61, (1999) ([PubMed](#)).
- Laird, Castillo, Kasprzak: "Gap junction turnover, intracellular trafficking, and phosphorylation of connexin43 in brefeldin A-treated rat mammary tumor cells." in: **The Journal of cell biology**, Vol. 131, Issue 5, pp. 1193-203, (1996) ([PubMed](#)).
- Loo, Berestecky, Kanemitsu, Lau: "pp60src-mediated phosphorylation of connexin 43, a gap junction protein." in: **The Journal of biological chemistry**, Vol. 270, Issue 21, pp. 12751-61, (1995) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of Connexin-43 on a rat cerebrum lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti-Connexin-43 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining on WI38 cells (human lung).

Image 3.

Generated from rat Connexin-43

