

Datasheet: AHP977

BATCH NUMBER 165013

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| Description: | RABBIT ANTI CONNEXIN 43 (pSer368) |
| Specificity: | CONNEXIN 43 (pSer368) |
| Other names: | GAP JUNCTION ALPHA-1 PROTEIN |
| Format: | Purified |
| Product Type: | Polyclonal Antibody |
| Isotype: | Polyclonal IgG |
| Quantity: | 0.1 ml |

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | | | ▪ | |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | ▪ | | | 1/1000 |

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Rat

Species Cross Reactivity

Based on sequence similarity, is expected to react with: Zebrafish, Chicken, Guinea Pig, Mouse, Dog, Human, Bovine

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Antiserum Preparation Antisera to rat connexin43 were raised by repeated immunisations of rabbits with highly

purified antigen. Purified IgG was prepared by affinity chromatography.

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| Buffer Solution | 10mM HEPES pH7.5 |
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| Preservative Stabilisers | 0.09% Sodium Azide 0.01% Bovine Serum Albumin 50% Glycerol |
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| Immunogen | Synthetic phosphopeptide corresponding to an amino acid sequence within connexin43 which includes phosphorylated Ser368 |
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| External Database Links | UniProt: P08050 Related reagents Entrez Gene: 24392 Gja1 Related reagents |
|--------------------------------|--|

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|-----------------|--------|
| Synonyms | Cxn-43 |
|-----------------|--------|

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|-------------|-----------|
| RRID | AB_566938 |
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| Specificity | <p>Rabbit anti Rat connexin 43 (pSer368) antibody recognizes connexin 43 (Cx43), also known as gap junction alpha-1 protein and gap junction 43 kDa heart protein, when phosphorylated at serine 368.</p> <p>Connexin 43 allows for the exchange of solutions between neighbouring cells through the formation of gap-junctional channels and is expressed in the brain, kidneys and myocardium, as well as vascular endothelial cells. A decrease in the permeability of gap-junctional channels occurs due to a conformational change in the structure of connexin 43, and that this is mediated by the phosphorylation of connexin 43 at residue serine 368, by Protein Kinase C (Bao et al. 2004).</p> <p>A possible link between connexin 43 and epilepsy has been investigated following the detection of high levels of connexin 43 in both low-grade tumours and peritumoural reactive astrocytes (Aronica et al. 2001).</p> |
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| Western Blotting | AHP977 detects a band of approximately 43kDa in rat hippocampus cell lysates. |
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| Further Reading | <ol style="list-style-type: none">1. Bao, X. <i>et al.</i> (2004) Mechanism of regulation of the gap junction protein connexin 43 by protein kinase C-mediated phosphorylation. Am J Physiol Cell Physiol. 286 (3): C647-54.2. Bao, X. <i>et al.</i> (2004) Regulation of purified and reconstituted connexin 43 hemichannels by protein kinase C-mediated phosphorylation of Serine 368. J Biol Chem. 279 (19): 20058-66.3. Aronica, E. <i>et al.</i> (2001) Expression of connexin 43 and connexin 32 gap-junction proteins in epilepsy-associated brain tumors and in the perilesional epileptic cortex. Acta Neuropathol. 101 (5): 449-59. |
|------------------------|--|

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10088 available at: <https://www.bio-rad-antibodies.com/SDS/AHP977>
10088

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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