

Datasheet: AHP977

BATCH NUMBER 160824

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.

Buffer Solution	10mM HEPES pH7.5
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Preservative Stabilisers	0.05% 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.
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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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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