

Datasheet: AHP977

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
Preservative Stabilisers	0.05% Sodium Azide 0.01% Bovine Serum Albumin 50% Glycerol
Immunogen	Synthetic phosphopeptide corresponding to an amino acid sequence within connexin43 which includes phosphorylated Ser368
External Database Links	UniProt: P08050 Related reagents Entrez Gene: 24392 Gja1 Related reagents
Synonyms	Cxn-43
RRID	AB_566938
Specificity	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. 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). 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).
Western Blotting	AHP977 detects a band of approximately 43kDa in rat hippocampus cell lysates.
Further Reading	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
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Health And Safety Information	Material Safety Datasheet documentation #10088 available at: 10088: https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
- Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [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
'M382880:210513'

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