

## Datasheet: AHP977

**BATCH NUMBER 160621**

<b>Description:</b>	RABBIT ANTI CONNEXIN 43 (pSer368)
<b>Specificity:</b>	CONNEXIN 43 (pSer368)
<b>Other names:</b>	GAP JUNCTION ALPHA-1 PROTEIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	Based on sequence similarity, is expected to react with: Zebrafish, Chicken, Guinea Pig, Mouse, Dog, Human, Bovine <b>N.B.</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.
<b>Product Form</b>	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.

<b>Buffer Solution</b>	10mM HEPES pH7.5
<b>Preservative Stabilisers</b>	0.05% Sodium Azide 0.01% Bovine Serum Albumin 50% Glycerol
<b>Immunogen</b>	Synthetic phosphopeptide corresponding to an amino acid sequence within connexin43 which includes phosphorylated Ser368
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P08050</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">24392</a> Gja1 <a href="#">Related reagents</a>
<b>Synonyms</b>	Cxn-43
<b>RRID</b>	AB_566938
<b>Specificity</b>	<p><b>Rabbit anti Rat connexin 43 (pSer368) antibody</b> 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 (<a href="#">Bao et al. 2004</a>).</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 (<a href="#">Aronica et al. 2001</a>).</p>
<b>Western Blotting</b>	AHP977 detects a band of approximately 43kDa in rat hippocampus cell lysates.
<b>Further Reading</b>	<ol style="list-style-type: none"><li>1. Bao, X. <i>et al.</i> (2004) Mechanism of regulation of the gap junction protein connexin 43 by protein kinase C-mediated phosphorylation. <a href="#">Am J Physiol Cell Physiol. 286 (3): C647-54.</a></li><li>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. <a href="#">J Biol Chem. 279 (19): 20058-66.</a></li><li>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. <a href="#">Acta Neuropathol. 101 (5): 449-59.</a></li></ol>

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10088 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP977">https://www.bio-rad-antibodies.com/SDS/AHP977</a></p> <p>10088</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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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