

**Phospho-Ser368 Connexin43 Antibody**  
**Affinity purified rabbit polyclonal antibody**  
**Catalog # AN1078****Specification**

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**Phospho-Ser368 Connexin43 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P08050</a>
Reactivity	Rat
Predicted	Bovine, Chicken, Human, Mouse, Pig, Zebrafish
Host	Rabbit
Clonality	polyclonal
Calculated MW	43 KDa

**Phospho-Ser368 Connexin43 Antibody - Additional Information**

Gene ID	24392
Gene Name	GJA1
<b>Other Names</b>	
Gap junction alpha-1 protein, Connexin-43, Cx43, Gap junction 43 kDa heart protein, Gja1, Cxn-43	

**Target/Specificity**

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser368 conjugated to KLH.

**Dilution**

WB~~ 1:1000

**Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

**Antibody Specificity**

Specific for the ~43k connexin43 protein phosphorylated at Ser368. Immunolabeling is blocked by  $\lambda$ -phosphatase treatment.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-Ser368 Connexin43 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

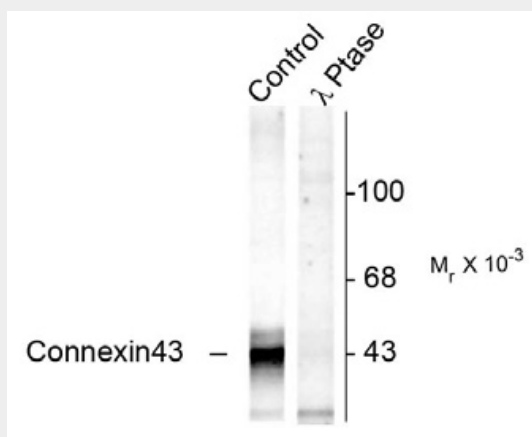
Blue Ice

## Phospho-Ser368 Connexin43 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Phospho-Ser368 Connexin43 Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~43k connexin43 phosphorylated at Ser368 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min) before being exposed to the phospho-Ser368 connexin43 antibody. The immunolabeling of connexin43 is completely eliminated by treatment with λ-Ptase.

## Phospho-Ser368 Connexin43 Antibody - Background

Gap junctional intercellular communication is thought to play a key role in development and may also be involved in epilepsy (Aronica et al., 2001). Connexin43 forms gap-junctional channels and regulates the permeability of these gap junctions to small organic molecules. Permeability of connexin43 is known to be regulated by phosphorylation at Ser368 by protein kinase C (Yogo et al., 2002; Bao et al., 2004a). Phosphorylation of Ser368 by PKC induces a conformational change of connexin43 that results in a decrease in gap junction permeability (Bao et al., 2004b).

## Phospho-Ser368 Connexin43 Antibody - References

- Aronica E, Gorter JA, Jansen GH, Leenstra S, Yankaya B, Troost D (2001) Expression of connexin 43 and connexin 32 gap-junction proteins in epilepsy-associated brain tumors and in the perilesional epileptic cortex. *Acta Neuropathol (Berl)* 101:449-459.
- Bao X, Altenberg GA, Reuss L (2004a) Mechanism of regulation of the gap junction protein connexin 43 by protein kinase C-mediated phosphorylation. *Am J Physiol Cell Physiol* 286:C647-C654.

Bao X, Reuss L, Altenberg GA (2004b) Regulation of purified and reconstituted connexin 43 hemichannels by protein

kinase C-mediated phosphorylation of Serine 368. J Biol Chem 279:20058-20066.

Yogo K, Ogawa T, Akiyama M, Ishida N, Takeya T (2002) Identification and functional analysis of novel

phosphorylation sites in Cx43 in rat primary granulosa cells. FEBS Lett 531:132-136.