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# Phospho-Ser368 Connexin43 Antibody

**Affinity purified rabbit polyclonal antibody**
**Catalog # AN1078**

## Specification

### Phospho-Ser368 Connexin43 Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P08050 |
| 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** |

**Other Names**
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 λ-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

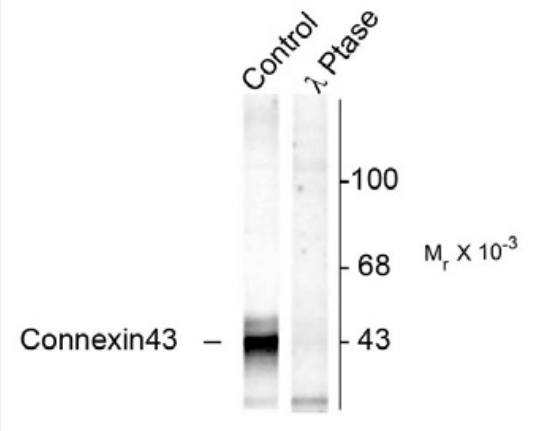
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## Phospho-Ser368 Connexin43 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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.