

### **Connexin43 Antibody**

Affinity purified rabbit polyclonal antibody Catalog # AN1083

#### Specification

### **Connexin43 Antibody - Product Information**

Application	WB
Primary Accession	<u>P08050</u>
Reactivity	Rat
Predicted	Chicken, Human, Mouse, Monkey, Xenopus,
	Zebrafish
Host	Rabbit
Clonality	polyclonal
Calculated MW	43 KDa

#### **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 peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

**Dilution** WB~~ 1:1000

**Format** Prepared from rabbit serum by affinity purification on a column made with the C-terminal peptide used as antigen.

Antibody Specificity Specific for the ~43k connexin43 protein.

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** Connexin43 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

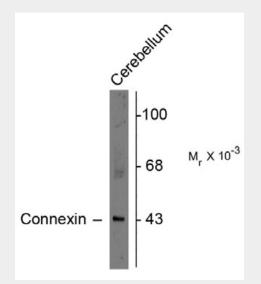
#### **Connexin43 Antibody - Protocols**



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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Connexin43 Antibody - Images



Western blot of rat cerebellar lysate showing specific immunolabeling of the  $\sim$ 43k connexin43 protein.

# **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 er368 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).

# 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

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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.