



## Mouse anti Connexin 43 Monoclonal Antibody

Alternative Name(s): Connexin 43; CX43; GJA1

### Order Information

- **Description:** Connexin 43
- **Catalogue:** 606-560
- **Lot:** See label
- **Size:** 100ug/200ul
- **Host:** Mouse
- **Clone:** CX-1B1
- **Application:** IHC(P), WB
- **Reactivity:** Hu, Ms, Rt

### **ANTIGEN PREPARATION**

A synthetic peptide corresponding to a segment of the 3rd cytoplasmic domain of human/rat connexin 43 protein.

### **BACKGROUND**

Connexin 43 is a member of the connexin gene family. The connexins are a group of gap junction proteins which form a hexamer to compose a connexon. Clusters of connexons form a gap junction through which low molecular weight proteins may diffuse from cell to cell. Several mammalian cells with malignant phenotypes exhibit decreased connexin expression and gap junction communication. In Src transformed cells, there is a decrease in gap junctional communication, which appears to be associated with tyrosine phosphorylation of connexin 43. Activated c-Src phosphorylates the C-terminal tail of connexin 43 on Tyr 265, resulting in a stable interaction between both proteins, which leads to inhibition of gap junctional communication. In addition to tyrosine phosphorylation, connexin 43 has also been shown to be phosphorylated on serine in the absence of Src kinases and on both serine and tyrosine in cells expressing Src kinases, such as c-Src and/or pp60v-Src. In human vascular endothelial cells, connexin 43 is posttranslationally modified during mitosis. Mitosis-specific phosphorylation of connexin 43 correlates with the transient loss of gap junction intercellular communication and redistribution of connexin 43.

### **PURIFICATION**

The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping

### **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

### **SPECIFICITY**

This antibody recognizes human Connexin 43 protein. It cross reacts to human, mice and rat.

### **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

### **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 43.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

### **FOR RESEARCH USE ONLY.**

AbboMax, Inc 2528 Qume Drive, Suite 8, San Jose, California 95131, USA  
1 408-573-1898 (Tel). 1 408-573-1858 (Fax). [www.abbomax.com](http://www.abbomax.com) [info@abbomax.com](mailto:info@abbomax.com)



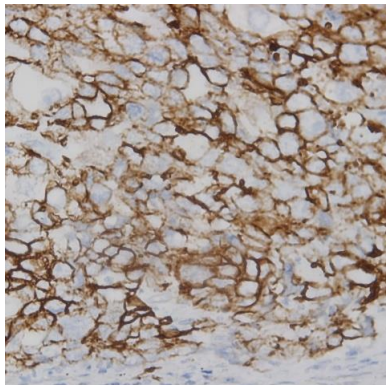
\*Optimal dilutions should be determined by researchers for the specific applications.

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## DATA ATTACHMENTS



Immunohistochemistry: Human breast carcinoma (FFPE) stained with Mouse anti- Connexin-43 (Cat# 606-560) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

## REFERENCES

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