

**Mouse Anti-Connexin 43/GJA1 [CXN6]: MC0171, MC0171RTU7**

**Intended Use:** For Research Use Only

**Description:** 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.

**Specifications**

Clone: CXN6  
Source: Mouse  
Reactivity: Human, mouse, rat, bovine  
Isotype: IgM  
Localization: Membrane  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, IF, IP, WB  
Package:

Description	Catalog No.	Size
Connexin 43/GJA1 Concentrated	MC0171	1 ml
Connexin 43/GJA1 Prediluted	MC0171RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Testis, heart  
Concentrated Dilution: 50-200  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Induction of oxidative stress and histological changes in liver by subacute doses of butyl cyclohexyl phthalate. Environ. Yavaşoğlu, NU. et al. Toxicol.. -, 2012.
2. Prenatal retinoic acid upregulates connexin 43 (Cx43) gene expression in pulmonary hypoplasia in the nitrofen-induced congenital diaphragmatic hernia rat model. Rutenstock, EM. et al. J. Pediatr. Surg.. 47: 336-340, 2012.
3. Cellular immunophenotypes in human embryonic, fetal and adult heart. Grigore, A. et al. Rom J Morphol Embryol. 53: 299-311, 2012.
4. Human dental pulp stem cells demonstrate better neural and epithelial stem cell properties than bone marrow-derived mesenchymal stem cells. Karaöz E et al. Histochem Cell Biol. . 136: 455-473, 2011.