

## Anti-Connexin-43 (C-terminal region) Antibody

Catalog # AN1720

## **Product Information**

Application WB, ICC
Primary Accession P17302
Host Mouse

**Clonality** Mouse Monoclonal

IsotypeIgG1Clone NamesM496Calculated MW43008

## **Additional Information**

Gene ID 2697

Other Names Gap junction alpha-1 43 GJA1 CXA1

**Target/Specificity** Connexin-43 (Cx43, CXA1, Gap Junction α1) is a member of the large family of

gap junction proteins. Connexins assemble as a hexamer and are transported to the plasma membrane to create a hemichannel that can associate with hemichannels on nearby cells to create cell-to-cell channels that cluster together to form gap junctions. Gap junction communication is critical for cell to cell communication during development and regulation of cell growth. Phosphorylation of connexin-43 is important in regulating both the assembly and the function of gap junctions. PKC phosphorylates Ser-368 in connexin-43 after activation of cells with phorbol esters. This phosphorylation event decreases cell-to-cell communication. In addition, the tyrosine kinase, c-Src, can interact with and phosphorylate Tyr-265 in connexin-43 leading to inhibition of gap junction communication. Thus, connexin-43 phosphorylation

inhibition of gap junction communication. Thus, connexin-43 phosphorylation may be an important mode for regulating gap junctional communication.

**Dilution** WB~~1:1000 ICC~~N/A

Format Antigen Affinity Purified

**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** Anti-Connexin-43 (C-terminal region) Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

**Shipping** Blue Ice

## **Background**

Connexin-43 (Cx43, CXA1, Gap Junction  $\alpha$ 1) is a member of the large family of gap junction proteins. Connexins assemble as a hexamer and are transported to the plasma membrane to create a hemichannel

that can associate with hemichannels on nearby cells to create cell-to-cell channels that cluster together to form gap junctions. Gap junction communication is critical for cell to cell communication during development and regulation of cell growth. Phosphorylation of connexin-43 is important in regulating both the assembly and the function of gap junctions. PKC phosphorylates Ser-368 in connexin-43 after activation of cells with phorbol esters. This phosphorylation event decreases cell-to-cell communication. In addition, the tyrosine kinase, c-Src, can interact with and phosphorylate Tyr-265 in connexin-43 leading to inhibition of gap junction communication. Thus, connexin-43 phosphorylation may be an important mode for regulating gap junctional communication.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.