

Connexin 43 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP1541b**Specification**

Connexin 43 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P17302](#)**Connexin 43 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 2697**Other Names**

Gap junction alpha-1 protein, Connexin-43, Cx43, Gap junction 43 kDa heart protein, GJA1, GJAL

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1541b](/product/products/AP1541b) was selected from the N-term region of human GJA1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Connexin 43 Antibody (N-term) Blocking peptide - Protein Information**Name** GJA1**Synonyms** GJAL**Function**

Gap junction protein that acts as a regulator of bladder capacity. A gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. May play a critical role in the physiology of hearing by participating in the recycling of potassium to the cochlear endolymph. Negative regulator of bladder functional capacity: acts by enhancing intercellular electrical and chemical transmission, thus sensitizing bladder muscles to cholinergic neural stimuli and causing them to contract (By similarity). May play a role in cell growth inhibition through the regulation of NOV expression and localization. Plays an essential role in gap junction communication in the ventricles (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Endoplasmic reticulum {ECO:0000250|UniProtKB:P23242}. Note=Localizes at the intercalated disk (ICD) in cardiomyocytes and the proper localization at ICD is dependent on TMEM65. {ECO:0000250|UniProtKB:P23242}

Tissue Location

Expressed in the heart and fetal cochlea.

Connexin 43 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Connexin 43 Antibody (N-term) Blocking peptide - Images**Connexin 43 Antibody (N-term) Blocking peptide - Background**

Gap junction protein, alpha 1 is a member of the connexin gene family and a component of gap junctions. Gap junctions are composed of arrays of intercellular channels and provide a route for the diffusion of materials of low molecular weight from cell to cell. Connexin 43 is the major protein of gap junctions in the heart, and gap junctions are thought to have a crucial role in the synchronized contraction of the heart and in embryonic development. Connexin 43 is targeted by several protein kinases that regulate myocardial cell-cell coupling. A related intron-less connexin 43 pseudogene, GJA1P, has been mapped to chromosome 5.

Connexin 43 Antibody (N-term) Blocking peptide - References

Spinella, F., et al., J. Biol. Chem. 278(42):41294-41301 (2003). Contreras, J.E., et al., Proc. Natl. Acad. Sci. U.S.A. 100(20):11388-11393 (2003). Qin, H., et al., J. Biol. Chem. 278(32):30005-30014 (2003). Cameron, S.J., et al., J. Biol. Chem. 278(20):18682-18688 (2003). Ma, X.D., et al., World J. Gastroenterol. 9(5):946-950 (2003).