

#### Connexin 40 Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP1545a

## Specification

# Connexin 40 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>P36382</u>

# Connexin 40 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 2702

Other Names Gap junction alpha-5 protein, Connexin-40, Cx40, GJA5

Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1545a>AP1545a</a> was selected from the N-term region of human GJA5. 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 40 Antibody (N-term) Blocking peptide - Protein Information

Name GJA5

Function

One 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.

**Cellular Location** Cell membrane; Multi-pass membrane protein. Cell junction, gap junction

## Connexin 40 Antibody (N-term) Blocking peptide - Protocols

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



#### <u>Blocking Peptides</u>

# Connexin 40 Antibody (N-term) Blocking peptide - Images

# Connexin 40 Antibody (N-term) Blocking peptide - Background

Gap junctions were first characterized by electron microscopy as regionally specialized structures on plasma membranes of contacting adherent cells. These structures were shown to consist of cell-to-cell closely packed transmembrane channels. Proteins, called connexins, purified from fractions of enriched gap junctions from different tissues differ. Connexins are designated by their molecular mass. Another system of nomenclature divides gap junction proteins into 2 categories, alpha and beta, according to sequence similarities at the nucleotide and amino acid levels. For example, CX43 is designated alpha-1 gap junction protein, whereas CX32 and CX26 are called beta-1 and beta-2 gap junction proteins, respectively. This nomenclature emphasizes that CX32 and CX26 are more homologous to each other than either of them is to CX43. Connexins have four transmembrane, three intracellular, and two extracellular regions. Different tissues express different connexins, though tissue specificities overlap, and a given tissue or cell can express several different connexins. Developmental regulation of at least some of the connexin genes has been found. Embryo implantation is regulated in part by temporally changing patterns of expression of connexins in the embryo and the maternal decidua.

## **Connexin 40 Antibody (N-term) Blocking peptide - References**

Dupays, L., et al., Gene 305(1):79-90 (2003).Simon, A.M., et al., Dev. Biol. 251(2):206-220 (2002).Cronier, L., et al., Mol. Hum. Reprod. 8(11):1005-1013 (2002).Oviedo-Orta, E., et al., Immunology 99(4):578-590 (2000).Gelb, B.D., et al., Genomics 39(3):409-411 (1997).