

Connexin 40 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1545A

Product Information

Application WB, IHC-P-Leica, E

Primary Accession <u>P36382</u>

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGCalculated MW40380Antigen Region102-134

Additional Information

Gene ID 2702

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

Target/Specificity This Connexin 40 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 102-134 amino acids from the

N-terminal region of human Connexin 40.

Dilution WB~~1:1000 IHC-P-Leica~~1:500 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Connexin 40 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

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

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.

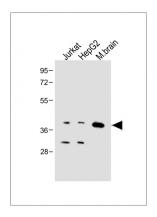
References

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).

Images



Immunohistochemical analysis of paraffin-embedded human stomach tissue using AP1545a performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



All lanes: Anti-Connexin 40 Antibody (N-term) at 1:4000 dilution Lane 1: Jurkat whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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