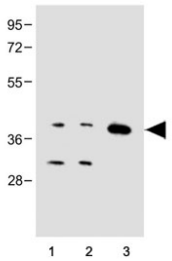
Cx40 Antibody / Connexin 40 / GJA5 (F55078)

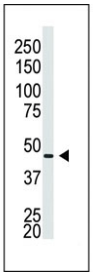
Catalog No.	Formulation	Size
F55078-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F55078-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

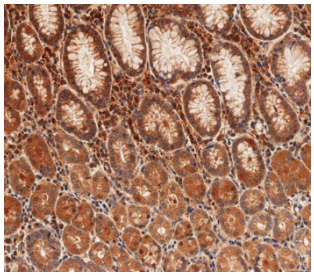
Availability	1-2 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
UniProt	P36382
Applications	Western blot: 1:2000-1:4000 Immunohistochemistry (FFPE): 1:100-1:500
Limitations	This Cx40 antibody is available for research use only.



Cx40 Antibody Human and Mouse WB. Western blot analysis of human Jurkat and HepG2 cell lysates together with mouse brain tissue lysate using Cx40 antibody demonstrates detection of a prominent immunoreactive band at approximately 40 kDa, consistent with the expected molecular weight of Connexin 40 (Cx40/GJA5). Cx40 is a gap junction protein that forms intercellular channels enabling the direct exchange of ions and signaling molecules between neighboring cells. The observed expression across both human and mouse samples supports the utility of this antibody for studies of gap junction biology, intercellular communication, cardiovascular signaling, and connexin-mediated cellular regulation. Predicted molecular weight: ~40 kDa.



Cx40 Antibody Human Placenta WB. Western blot analysis of human placental tissue lysate using Cx40 antibody demonstrates detection of a distinct immunoreactive band at approximately 40-45 kDa, consistent with the expected molecular weight of Connexin 40 (Cx40/GJA5). Connexin 40 is a transmembrane gap junction protein that forms intercellular channels facilitating the direct exchange of ions, metabolites, and signaling molecules between neighboring cells. The observed band supports expression of Cx40 in placental tissue and demonstrates the utility of this antibody for studies of gap junction biology, intercellular communication, tissue homeostasis, and connexin-mediated signaling pathways. Predicted molecular weight: ~40 kDa.



Cx40 Antibody Human Stomach IHC. Immunohistochemistry staining of FFPE human stomach tissue using Cx40 antibody demonstrates widespread cytoplasmic and membranous staining throughout gastric epithelial cell populations, consistent with expression of Connexin 40 (Cx40/GJA5). Cx40 is a gap junction protein that forms intercellular channels facilitating the direct exchange of ions, metabolites, and signaling molecules between neighboring cells. The observed staining pattern is consistent with the role of connexin proteins in coordinating cell-to-cell communication, maintaining tissue organization, and supporting physiologic homeostasis within epithelial tissues. These findings support the utility of Cx40 antibody for studies of gap junction biology, intercellular communication, and connexin-mediated signaling pathways. HIER: steam section in pH9 EDTA buffer for 20 min and allow to cool prior to staining.

Description

Cx40 Antibody is designed for the detection and study of Cx40 (Connexin 40), a transmembrane gap junction protein encoded by the GJA5 gene. Cx40 belongs to the connexin family of proteins that assemble into gap junction channels, specialized structures that permit direct communication between neighboring cells. Through the transfer of ions, metabolites, and small signaling molecules, Cx40 contributes to cellular coordination, tissue homeostasis, and regulation of physiologic function across multiple organ systems.

Cx40 is best known for its role in tissues that require rapid and synchronized communication between adjacent cells. Gap junction channels formed by Cx40 facilitate direct cell-to-cell signaling and allow groups of cells to function as integrated biologic units. This intercellular communication is essential for coordinating cellular responses, maintaining tissue organization, and supporting normal physiologic activity.

Expression of Cx40 has been extensively studied in cardiovascular tissues, where gap junction proteins contribute to the propagation of electrical and chemical signals between neighboring cells. Beyond cardiovascular biology, Cx40-mediated communication pathways are also investigated in developmental biology, vascular signaling, tissue organization, and cellular communication networks. Because connexins regulate the exchange of signaling molecules between cells, they occupy important positions within pathways controlling coordinated tissue function.

Alterations in gap junction signaling have been associated with changes in cellular communication, tissue organization, and physiologic regulation. As a result, Cx40 continues to be an important target for research examining how direct intercellular communication influences development, homeostasis, and disease-associated cellular responses. Its well-characterized role in gap junction biology has established Cx40 as one of the most widely studied members of the connexin protein family.

Cx40 Antibody is useful for investigating gap junction biology, intercellular communication, cardiovascular signaling, tissue homeostasis, and connexin-mediated cellular regulation. Researchers utilize Cx40 Antibody reagents to evaluate protein expression patterns and study molecular mechanisms governing membrane channel activity, cell-to-cell communication, and coordinated tissue function.

Learn more about Connexin 40 and its role in cell-to-cell communication, cardiovascular signaling, and gap junction biology on our Connexin 40 Antibody / Gap Junction Protein Antibody page.

Application Notes

Titration of the Cx40 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 102-134 from the human protein was used as the immunogen for this Cx40 antibody.

Storage

Aliquot the Cx40 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Cx40 Antibody, Connexin 40 Antibody, GJA5 Antibody, Gap Junction Alpha-5 Protein Antibody, Cardiac Gap Junction Protein Antibody, Intercellular Communication Protein Antibody

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