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Connexin 50 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1548a

Product Information

Application	WB, E
Primary Accession	P48165
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48229
Antigen Region	99-130

Additional Information

Gene ID	2703
Other Names	Gap junction alpha-8 protein, Connexin-50, Cx50, Lens fiber protein MP70, GJA8
Target/Specificity	This Connexin 50 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 99-130 amino acids from the N-terminal region of human Connexin 50.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 50 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GJA8
Function	Structural component of eye lens gap junctions (PubMed: 18006672, PubMed:19756179). Gap junctions are dodecameric channels that connect the cytoplasm of adjoining cells. They are formed by the docking of two hexameric hemichannels, one from each cell membrane (By similarity). Small molecules and ions diffuse from one cell to a neighboring cell via the central

pore (PubMed:18006672, PubMed:19756179).

Cellular Location Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P55917}. Cell junction, gap junction

Tissue Location Eye lens..

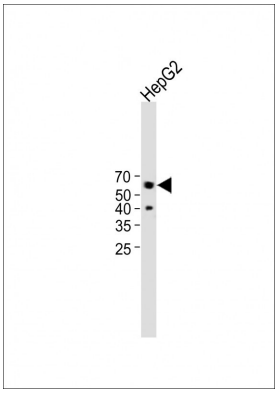
Background

GJA8 is a an integral membrane protein that belongs to the connexin family, alpha-type (group II) subfamily. 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. A connexon is composed of a hexamer of connexins. This particular connexin only forms junctional channels. GJA8 is expressed in the eye lens, and defects in GJA8 are the cause of zonular pulverulent cataract type 1 (CZP1), a form of autosomal dominant congenital cataract.

References

Shiels, A., et al., Am. J. Hum. Genet. 62(3):526-532 (1998).
Church, R.L., et al., Curr. Eye Res. 14(10):979-981 (1995).
Church, R.L., et al., Curr. Eye Res. 14(3):215-221 (1995).

Images



All lanes : Anti-Connexin 50 Antibody (N-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 60kDa Blocking/Dilution buffer : 5% NFDM/TBST.

Citations

- Intramolecular loop/tail interactions are essential for connexin 43-hemichannel activity.