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Connexin 50 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1548b

Product Information

Application	WB, IHC-P, E
Primary Accession	P48165
Other Accession	P36381
Reactivity	Human, Mouse
Predicted	Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1383/RB1384
Calculated MW	48229
Antigen Region	402-433

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 402-433 amino acids from the C-terminal region of human Connexin 50.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 (C-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..

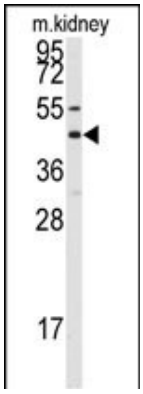
Background

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.

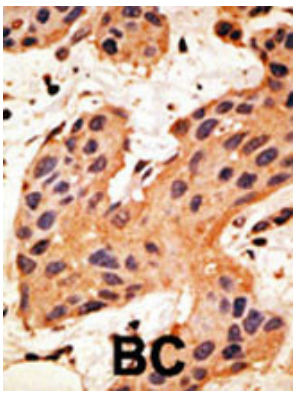
References

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



Western blot analysis of anti-GJA8 Antibody (C-term) (Cat.#AP1548b) in mouse kidney tissue lysates (35ug/lane). GJA8 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.