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Connexin 31 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1543b

Product Information

Application	WB, IHC-P, E
Primary Accession	O75712
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0445
Calculated MW	30818
Antigen Region	227-257

Additional Information

Gene ID	2707
Other Names	Gap junction beta-3 protein, Connexin-31, Cx31, GJB3, CX31
Target/Specificity	This Connexin 31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 227-257 amino acids from the C-terminal region of human Connexin 31.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is 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 31 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GJB3
Synonyms	CX31
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

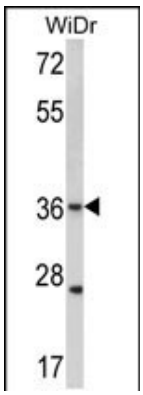
Background

Gap junctions are conduits that allow the direct cell-to-cell passage of small cytoplasmic molecules, including ions, metabolic intermediates, and second messengers, and thereby mediate intercellular metabolic and electrical communication. Gap junction channels consist of connexin protein subunits, which are encoded by a multigene family. GJBs (gap-junction proteins or connexins) play crucial functional roles associated with these channels. Defects in GJB3 have been linked to erythrokeratodermia variabilis (EKV) is an autosomal dominant genodermatosis characterized by transient figurate red patches or hyperkeratosis. Mutations in GJB2 have also been associated with genetically derived hearing impairments, including autosomal recessive nonsyndromic deafness.

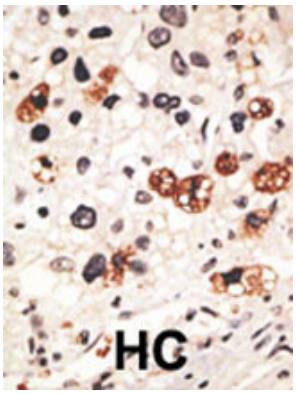
References

Mhatre, A.N., et al., Clin. Genet. 63(2):154-159 (2003).
Diestel, S., et al., Biochem. Biophys. Res. Commun. 296(3):721-728 (2002).
Di, W.L., et al., Hum. Mol. Genet. 11(17):2005-2014 (2002).
Gottfried, I., et al., Hum. Mol. Genet. 11(11):1311-1316 (2002).
Wenzel, K., et al., Biochem. Biophys. Res. Commun. 248(3):910-915 (1998).

Images



Western blot analysis of hGJB3-C241 (Cat. #AP1543b) in WiDr cell line lysates (35ug/lane). GJB3 (arrow) was detected using the purified Pab.(2ug/ml)



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.