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GJB2 Antibody

Catalog # ASC11872

Product Information

Application	WB, E
Primary Accession	P29033
Other Accession	NP_003995, 42558283
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26215
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GJB2 antibody can be used for detection of GJB2 by Western blot at 1 - 2 g/ml.

Additional Information

Gene ID	2706
Other Names	Gap junction beta-2 protein, Connexin-26, Cx26, GJB2
Target/Specificity	GJB2; GJB2 antibody is human specific.
Reconstitution & Storage	GJB2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	GJB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GJB2
Function	Structural component of gap junctions (PubMed: 16849369, PubMed:17551008, PubMed:19340074, PubMed:19384972, PubMed:21094651, PubMed:26753910). 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 (PubMed:17551008, PubMed:19340074, PubMed:21094651, PubMed:26753910). Small molecules and ions diffuse from one cell to a neighboring cell via the central pore (PubMed:16849369, PubMed:19384972, PubMed:21094651).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Note=Colocalizes with GJB4 at gap junction plaques in the cochlea. {ECO:0000250|UniProtKB:Q00977}

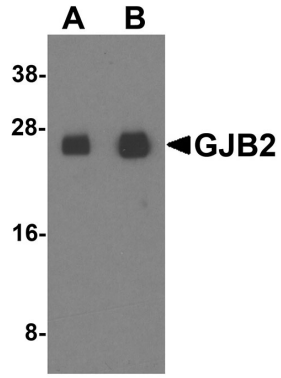
Background

The Gap junction beta-2 protein (GJB2), also known as Connexin 26, is member of the gap junction protein family which form structures that were shown to consist of cell-to-cell channels that facilitate the transfer of ions and small molecules between cells (1). Mutations in the GJB2 gene are thought to be responsible for as much as 35-45% of congenital sensorineural hearing loss in some populations (2). Other mutations in this gene have also been linked to a wide array of skin diseases (3).

References

Zhou JZ and Jiang JX. Gap junctions and hemichannel-independent actions of connexins on cell and tissue functions – An update. FEBS Lett. 2014; 588:1186-92.
Petit C, Levilliers J, and Hardelin JP. Molecular genetics of hearing loss. Annu. Rev. Genet. 2001; 35:589-646.
Gerido DA and White TW. Connexin disorders of the ear, skin, and lens. Biochim. Biophys. Acta. 2004; 1662:159-70.

Images



Western blot analysis of GJB2 in human colon tissue lysate with GJB2 antibody at (A) 1 and (B) 2 µg/ml.

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