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GJB2 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1542a

Specification

GJB2 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P29033
Other Accession	A2VE67, P46691
Reactivity	**Human, Mouse**
Predicted	**Bovine, Sheep**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**204-226**

GJB2 Antibody (C-term) - Additional Information

Gene ID 2706

Other Names
Gap junction beta-2 protein, Connexin-26, Cx26, GJB2

Target/Specificity
This GJB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 204-226 amino acids from the C-terminal region of human GJB2.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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
GJB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GJB2 Antibody (C-term) - 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).

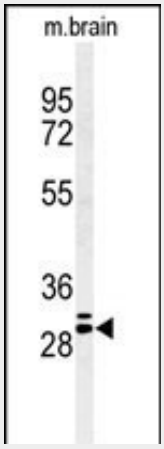
Cellular Location
Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Note=Colocalizes with GJB4 at gap junction plaques in the cochlea. {ECO:0000250|UniProtKB:Q00977}

GJB2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GJB2 Antibody (C-term) - Images



Western blot analysis of hGJB2-C218.Connexin (Cat. #AP1542a) in mouse brain tissue lysates (35ug/lane). GJB2 (arrow) was detected using the purified Pab.

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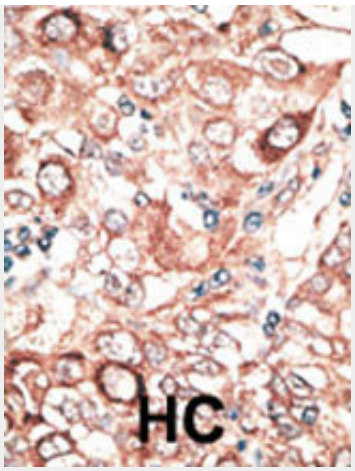

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast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

GJB2 Antibody (C-term) - 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. Immunohistochemical staining of human cochlear cells demonstrated high levels of GJB2 expression. Mutations in GJB2 are associated with genetically derived hearing impairments, including autosomal recessive nonsyndromic deafness.

GJB2 Antibody (C-term) - References

Ohtsuka, A., et al., Hum. Genet. 112(4):329-333 (2003).
Yotsumoto, S., et al., Br. J. Dermatol. 148(4):649-653 (2003).
Uyguner, O., et al., Clin. Genet. 62(4):306-309 (2002).
Richard, G., et al., Am. J. Hum. Genet. 70(5):1341-1348 (2002).
Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).