

GJB2 Antibody

Catalog # ASC11872

Specification

GJB2 Antibody - Product Information

Application WB
Primary Accession Other Accession NP_003995, 42558283

Reactivity Human
Host Rabbit
Clonality Polyclonal

Isotype IgG

Calculated MW Predicted: 25 kDa

Observed: 26 kDa

KDa

Application Notes GJB2 antibody can

be used for detection of GJB2 by Western blot at 1 - 2 μg/ml.

GJB2 Antibody - Additional Information

Gene ID **2706**

Target/Specificity

GJB2; GJB2 antibody is human specific.

Reconstitution & Storage

GJB2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

GJB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GJB2 Antibody - Protein Information

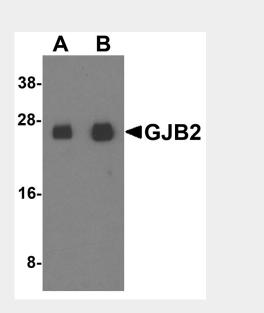
Name GJB2

Function

Structural component of gap junctions (PubMed:<a href="http://www.uniprot.org/c itations/17551008"

target=" blank">17551008,

PubMed:<a href="http://www.uniprot.org/ci



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

GJB2 Antibody - Background

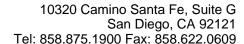
The Gap junction beta-2 protein (GJB2), also known as Connexin 26, is member of the gap junction protein family which form structures that were shown to consist of cell-to-cell channels that facilitate the transfer of ions and small molecules between cells (1). Mutations in the GJB2 gene are thought 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).

GJB2 Antibody - 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





tations/19340074"

target=" blank">19340074,

PubMed:<a href="http://www.uniprot.org/ci tations/21094651"

target=" blank">21094651,

PubMed:<a href="http://www.uniprot.org/ci

tations/26753910"

target=" blank">26753910,

PubMed:<a href="http://www.uniprot.org/ci

tations/16849369"

target=" blank">16849369,

PubMed:<a href="http://www.uniprot.org/ci

tations/19384972"

target="_blank">19384972). 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:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell membrane (PubMed:
hexameric hemichannels, one from each cell mem

ww.uniprot.org/citations/17551008"

target=" blank">17551008,

PubMed:<a href="http://www.uniprot.org/ci

tations/19340074"

target=" blank">19340074,

PubMed:<a href="http://www.uniprot.org/ci

tations/21094651"

target=" blank">21094651,

PubMed:<a href="http://www.uniprot.org/ci

tations/26753910"

target="_blank">26753910). Small molecules and ions diffuse from one cell to

a neighboring cell via the central pore

(PubMed:<a href="http://www.uniprot.org/c

itations/21094651" target=" blank">21094651,

PubMed:<a href="http://www.uniprot.org/ci

tations/16849369"

target=" blank">16849369,

PubMed:<a href="http://www.uniprot.org/ci

tations/19384972"

target=" blank">19384972).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction.

Note=Colocalizes with GIB4 at gap junction

plaques in the cochlea.

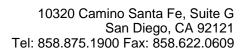
{ECO:0000250|UniProtKB:Q00977}

GJB2 Antibody - Protocols

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

• Western Blot

of the ear, skin, and lens. Biochim. Biophys. Acta. 2004; 1662:159-70.





• Blocking Peptides

- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture