

**GJB2 Antibody**  
**Catalog # ASC11872****Specification****GJB2 Antibody - Product Information**

Application  
Primary Accession  
Other Accession  
Reactivity  
Host  
Clonality  
Isotype  
Calculated MW

**WB**  
[P29033](#)  
[NP\\_003995](#), [42558283](#)  
**Human**  
**Rabbit**  
**Polyclonal**  
**IgG**  
**Predicted: 25 kDa**

Application Notes

**Observed: 26 kDa KDa**  
**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/citations/16849369" target="\_blank">16849369</a>, PubMed:<a href="http://www.uniprot.org/citations/17551008" target="\_blank">17551008</a>, PubMed:<a href="http://www.uniprot.org/citations/19340074" target="\_blank">19340074</a>, PubMed:<a href="http://www.uniprot.org/citations/19384972" target="\_blank">19384972</a>, PubMed:<a href="http://www.uniprot.org/citations/21094651" target="\_blank">21094651</a>, PubMed:<a href="http://www.uniprot.org/citations/26753910" target="\_blank">26753910</a>). 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:<a href="http://www.uniprot.org/citations/17551008" target="\_blank">17551008</a>, PubMed:<a href="http://www.uniprot.org/citations/19340074" target="\_blank">19340074</a>, PubMed:<a href="http://www.uniprot.org/citations/21094651" target="\_blank">21094651</a>, PubMed:<a href="http://www.uniprot.org/citations/26753910" target="\_blank">26753910</a>). Small

molecules and ions diffuse from one cell to a neighboring cell via the central pore (PubMed:<a href="http://www.uniprot.org/citations/16849369" target="\_blank">16849369</a>, PubMed:<a href="http://www.uniprot.org/citations/19384972" target="\_blank">19384972</a>, PubMed:<a href="http://www.uniprot.org/citations/21094651" target="\_blank">21094651</a>).

### Cellular Location

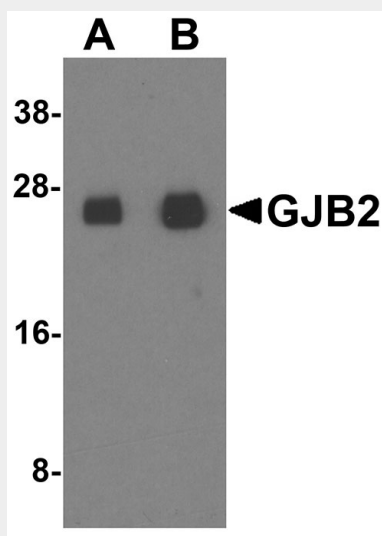
Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Note=Colocalizes with GJB4 at gap junction plaques in the cochlea. {ECO:0000250|UniProtKB:Q00977}

### GJB2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GJB2 Antibody - Images



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