10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GJB2 Antibody
Catalog # ASC11872

Specification

GJB2 Antibody - Product Information

Application	**WB, E**
Primary Accession	P29033
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℃ 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.

GJB2 Antibody - 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).

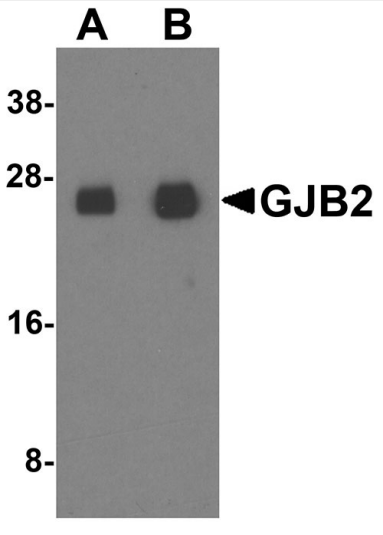
Cellular Location
Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. Note=Colocalizes with GJB4 at gap junction plaques in the cochlea. {ECO:0000250|UniProtKB:Q00977}

GJB2 Antibody - 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 - 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.