

#### Goat Anti-GJB2 / Connexin 26 Antibody

Peptide-affinity purified goat antibody Catalog # AF1482a

### **Specification**

# Goat Anti-GJB2 / Connexin 26 Antibody - Product Information

Application WB
Primary Accession P29033

Other Accession NP 003995, 2706, 14619 (mouse), 394266 (rat)

Reactivity
Predicted
Host
Clonality
Concentration

Mouse
Human, Rat
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 26215

# Goat Anti-GJB2 / Connexin 26 Antibody - Additional Information

#### **Gene ID 2706**

#### **Other Names**

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

#### Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-GJB2 / Connexin 26 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-GJB2 / Connexin 26 Antibody - Protein Information

# Name GJB2

# **Function**

Structural component of gap junctions (PubMed:<a

 $href="http://www.uniprot.org/citations/16849369" target="\_blank">16849369</a>, PubMed:<a href="http://www.uniprot.org/citations/17551008" target="\_blank">17551008</a>, PubMed:<a href="http://www.uniprot.org/citations/19340074" target="_blank">19340074</a>, PubMed:<a href="http://www.uniprot.org/citations/19384972" target="_blank">19384972</a>, PubMed:<a href="http://www.uniprot.org/citations/21094651" target="_blank">21094651</a>, PubMed:$ 



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}

#### Goat Anti-GJB2 / Connexin 26 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

#### Goat Anti-GJB2 / Connexin 26 Antibody - Images



AF1482a (0.01  $\mu$ g/ml) staining of Mouse Brain lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-GJB2 / Connexin 26 Antibody - Background

This gene encodes a member of the gap junction protein family. The gap junctions were first characterized by electron microscopy as regionally specialized structures on plasma membranes of contacting adherent cells. These structures were shown to consist of cell-to-cell channels that





Tel: 858.875.1900 Fax: 858.875.1999

facilitate the transfer of ions and small molecules between cells. The gap junction proteins, also known as connexins, purified from fractions of enriched gap junctions from different tissues differ. According to sequence similarities at the nucleotide and amino acid levels, the gap junction proteins are divided into two categories, alpha and beta. Mutations in this gene are responsible for as much as 50% of pre-lingual, recessive deafness.

# Goat Anti-GJB2 / Connexin 26 Antibody - References

Carrier frequency of GIB2 gene mutations c.35delG, c.235delC and c.167delT among the populations of Eurasia. Dzhemileva LU, et al. | Hum Genet, 2010 Aug 26. PMID 20739944. Genetic causes of nonsyndromic hearing loss in Iran in comparison with other populations. Mahdieh N, et al. J Hum Genet, 2010 Aug 26. PMID 20739942.

Prevalence of c.35delG and p.M34T mutations in the GIB2 gene in Estonia. Teek R, et al. Int I Pediatr Otorhinolaryngol, 2010 Sep. PMID 20708129.

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID

Genotyping with a 198 mutation arrayed primer extension array for hereditary hearing loss: assessment of its diagnostic value for medical practice. Rodriguez-Paris J, et al. PLoS One, 2010 Jul 26. PMID 20668687.