

GJB2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1542a**Specification**

GJB2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P29033](#)**GJB2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 2706**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1542a](/product/products/AP1542a) was selected from the C-term region of human GJB2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GJB2 Antibody (C-term) Blocking Peptide - Protein Information**Name** GJB2**Function**

Structural component of gap junctions (PubMed: [17551008](http://www.uniprot.org/citations/17551008), PubMed: [19340074](http://www.uniprot.org/citations/19340074), PubMed: [21094651](http://www.uniprot.org/citations/21094651), PubMed: [26753910](http://www.uniprot.org/citations/26753910), PubMed: [16849369](http://www.uniprot.org/citations/16849369), PubMed: [19384972](http://www.uniprot.org/citations/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: [17551008](http://www.uniprot.org/citations/17551008), PubMed: [19340074](http://www.uniprot.org/citations/19340074), PubMed: [21094651](http://www.uniprot.org/citations/21094651), PubMed: [26753910](http://www.uniprot.org/citations/26753910), PubMed: [16849369](http://www.uniprot.org/citations/16849369), PubMed: [19384972](http://www.uniprot.org/citations/19384972)).

href="http://www.uniprot.org/citations/26753910" target="_blank">26753910). Small molecules and ions diffuse from one cell to a neighboring cell via the central pore (PubMed:21094651, PubMed:16849369, PubMed:19384972).

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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GJB2 Antibody (C-term) Blocking Peptide - Images

GJB2 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).