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

Anti-GJB2 Antibody
Catalog # ABO10518

Specification

Anti-GJB2 Antibody - Product Information

Application	**WB**
Primary Accession	P29033
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Gap junction beta-2 protein(GJB2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GJB2 Antibody - Additional Information

Gene ID 2706

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

Calculated MW
26215 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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

Protein Name
Gap junction beta-2 protein

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human GJB2(1-16aa, MDWGTLQTILGGVNKH), different from the related mouse and rat sequences by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the connexin family. Beta-type (group I) subfamily.

Anti-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}

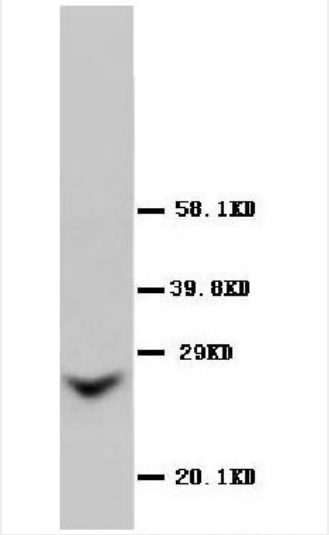
Anti-GJB2 Antibody - Protocols

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

Anti-GJB2 Antibody - Images

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



Anti-GJB2 antibody, ABO10518, Western blottingWB: Rat Liver Tissue Lysate

Anti-GJB2 Antibody - Background

Connexin26(CX26), also known as GAP junction protein, beta2, GJB2. 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. Proteins, called connexins, purified from fractions of enriched gap junctions from different tissues differ. The 3-prime untranslated region of the CX26 transcript contains a putative mRNA instability sequence. The deduced 226-amino acid protein has a calculated molecular mass of about 26 kD. CX26 shares 92.5% identity with rat Cx26. connexin 26(GJB2) is assigned to human chromosome 13q11-q12 .Connexin 26 regulates epidermal barrier and wound remodeling and promotes psoriasiform response. Connexin 26 gene(GJB2) mutation modulates the severity of hearing loss associated with the 1555A-G mitochondrial mutation.