

Product datasheet for **RG202092**

GJB2 (NM_004004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GJB2 (NM_004004) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GJB2
Synonyms:	BAPS; CX26; DFNA3; DFNA3A; DFNB1; DFNB1A; HID; KID; NSRD1; PPK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202092 representing NM_004004 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATTGGGCACGCTGCAGACGATCCTGGGGGTGTGAACAAACTCCACCAGCATTGGAAAGATCT
GGCTCACCGTCTCTTCATTTTTTCGATTATGATCCTCGTTGGCTGCAAAGGAGGTGTGGGAGATGA
GCAGGCCGACTTTGTCTGCAACACCTGCAGCCAGGCTGCAAGAAGTGTGCTACGATCACTACTCCCC
ATCTCCACATCCGGCTATGGCCCTGCAGCTGATCTTCGTGTCCAGCCAGCGCTCCTAGTGGCCATGC
ACGTGGCCTACCGGAGACATGAGAAGAAGAGGAAGTTCATCAAGGGGAGATAAAGAGTGAATTTAAGGA
CATCGAGGAGATCAAACCCAGAAGTCCGCATCGAAGGCTCCCTGTGGTGGACCTACACAAGCAGCATC
TTCTCCGGGTCACTTCGAAGCCGCCTTCATGTACGTCTTCTATGTCATGTACGACGGCTTCTCCATGC
AGCGGCTGGTGAAGTGAACGCCTGGCCTGTCCCAACTGTGGACTGCTTTGTGTCCCGGCCACGGA
GAAGACTGTCTTCACAGTGTTCATGATTGCAGTGTCTGGAATTTGCATCCTGCTGAATGTCACTGAATTTG
TGTTATTTGCTAATTAGATATTGTTCTGGGAAGTCAAAAAGCCAGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG202092 representing NM_004004
 Red=Cloning site Green=Tags(s)

MDWGLTQILGGVNHSTSIGKIWLTVLFIFRIMILVVAAKEVWGDEQADFVNCNTLQPGCKNVCYDHYFP
 ISHIRLWALQLIFVSTPALLVAMHVAYRRHEKKRKF IKGEIKSEFKDIEEIKTKQVRIEGLWWTYSSSI
 FFRVIFEAAFMYVFYVMYDGF SMQRLVKCNAWPCPNTVDCFVSRPTEKTVFTVMFIAVSGICILLNVTEL
 CYLLIRYCSGSKKPV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004004

ORF Size: 678 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004004.6](#)

RefSeq Size: 2263 bp

RefSeq ORF: 681 bp

Locus ID: 2706

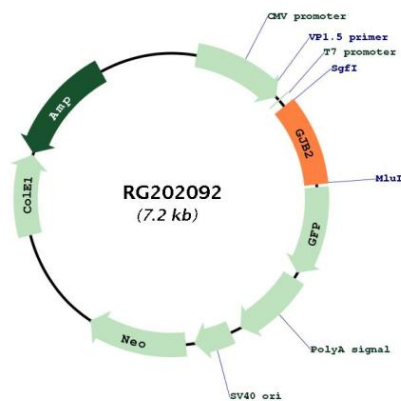
UniProt ID: [P29033](#)

Cytogenetics: 13q12.11

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Gene Summary: 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 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. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG202092