

Product datasheet for **RC202092**

GJB2 (NM_004004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GJB2 (NM_004004) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GJB2
Synonyms:	BAPS; CX26; DFNA3; DFNA3A; DFNB1; DFNB1A; HID; KID; NSRD1; PPK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>>RC202092 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</p> <p>TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCCGATCGCC</p> <p>ATGGATTGGGGCACGCTGCAGACGATCCTGGGGGTGTGAACAAACACTCCACCAGCATTGGAAGATCT GGCTACCGTCTCTTCATTTTTTCGATTATGATCCTCGTTGGCTGCAAAGGAGGTGTGGGAGATGA GCAGGCCGACTTTGTCTGCAACACCTGCAGCCAGGCTGCAAGACGTGTGCTACGATCACTACTCCCC ATCTCCACATCCGGCTATGGCCCTGCAGCTGATCTTCGTGTCCACGCCAGCGCTCCTAGTGGCCATGC ACGTGGCTACCGGAGACATGAGAAGAAGAGGAAGTTCATCAAGGGGAGATAAAGAGTGAATTTAAGGA CATCGAGGAGATCAAAACCCAGAAGGTCCGCATCGAAGGCTCCCTGTGGTGGACCTACACAAGCAGCATC TTCTTCCGGGTCACTTTCGAAGCCGCCTTCATGTACGTCTTCTATGTCATGTACGACGGCTCTCCATGC AGCGGCTGGTGAAGTGCAACGCCTGGCCTTGCCCAACACTGTGGACTGCTTTGTGTCCCGGCCACGGA GAAGACTGTCTTCACAGTGTTATGATTGCAGTGTCTGGAATTTGCATCCTGCTGAATGTCACTGAATTG TGTTATTTGCTAATTAGATATTGTTCTGGGAAGTCAAAAAGCCAGTT</p> <p>ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA</p>



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Protein Sequence: >RC202092 protein sequence
 Red=Cloning site Green=Tags(s)

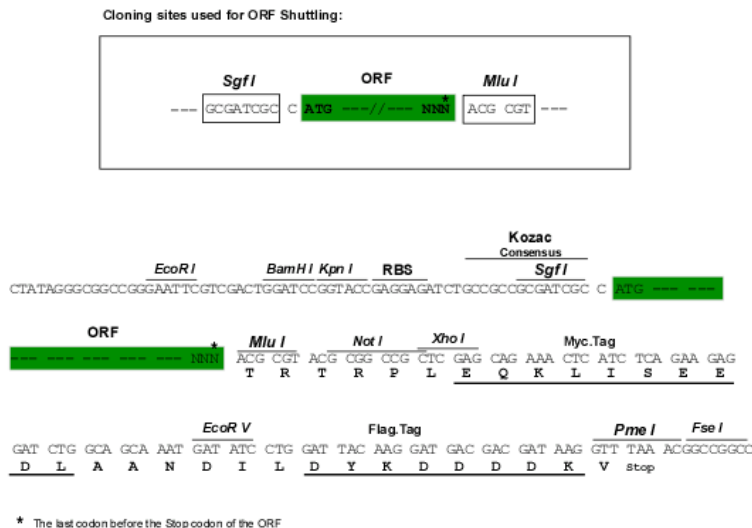
MDWGTLTQILGGVKNHSTSIGKIWLTVLFIFRIMILVVAKEVWGDEQADFVCNTLQPGCKNVCDHYFP
 ISHIRLWALQLIFVSTPALLVAMHVAYRRHEKKRKF IKGEIKSEFKDIEEIKTQKVRIEGLWWTYSSSI
 FFRVIFEAAFMVYFYVMDGFSMQRLVKCNAWPCPNTVDCFSVRPTEKTVFTVFMIAVSGICILLNVT
 ELLIRYCSGSKKPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6011_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004004

ORF Size: 678 bp

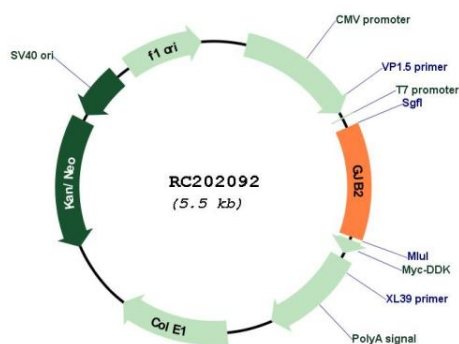
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

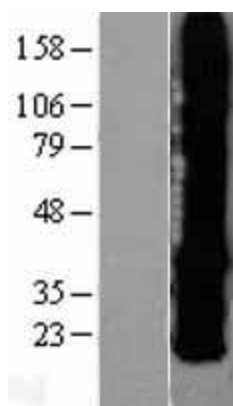
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none"> 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:	<u>NM_004004.6</u>
RefSeq Size:	2347 bp
RefSeq ORF:	681 bp
Locus ID:	2706
UniProt ID:	<u>P29033</u>
Cytogenetics:	13q12.11
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
MW:	26.2 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC202092



Western blot validation of overexpression lysate (Cat# [LY401306]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202092 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).