

## Product datasheet for **RC212096**

### **GJC2 (NM\_020435) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GJC2 (NM_020435) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GJC2
Synonyms:	CX46.6; Cx47; GJA12; HLD2; LMPH1C; LMPHM3; PMLDAR; SPG44
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC212096 representing NM\_020435  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACCAACATGAGCTGGAGCTTCTGACGCGGCTGCTGGAGGAGATCCACAACCACTCCACCTTCGTGG  
 GCAAGGTGTGGCTCACGGTGTGGTCTTCCGCATCGTGTGACGGCTGTGGCGGCGAGGCCATCTA  
 CTCGGACGAGCAGGCCAAGTTCACCTTGAACACGCGCAGCCAGGCTGCGACAACGTCTGTATGACGCC  
 TTCGCGCCCTGTGCGACGTGCGCTTCTGGGTCTTCCAGATTGTGGTTCATCTCCACGCCCTCGGTATGT  
 ACCTGGGTACGCCGTGCACCGCTGGCCCGTGCCTGTGAGCAGGAGCGGCGCCGCGCCCTCCGCCGCCG  
 CCCGGGGCCACGCGCGGCCCGAGCGCACCTGCCGCCCGCAGCGCGCTGGCTGAGCCCGCCGAC  
 CTGGGCGAGGAGCCATGCTGGGCTGGGCGAGGAGGAGGAGGAGGAGGAGACGGGGGACGCCGAGG  
 GCGCCGGCGAGGAAGCGGAGGAGGAGGCGGAGGAGGCGTGCCTAAGCGGTGCGCGCTGACGGCAA  
 GCGCGCAGGGACCCGGGCCGACCGGGCAACACGATGGGCGGAGCGCATCCAGCGGGAGGGCCTGATG  
 CCGGTGTACGTGGCCAGCTGGTGGCCAGGGCAGCTTTCGAGGTGGCCTTCTGGTGGGCCAGTACCTGC  
 TGTACGGCTTCGAGGTGCGACCGTTCTTCCCTGCAGCCGCCAGCCCTGCCCGCAGTGGTGGACTGCTT  
 CGTGTGCGCCCTACTGAAAAGACGGTCTTCTGCTGGTTATGTACGTGGTCACTGCCTGTGCCTGCTG  
 CTCAACCTCTGTGAGATGGCCACCTGGGCTTGGGCAGCGCGCAGGACCGGTCGCGGCCCGCCGCGCC  
 CCCCAGCTCCGCCCGCCCGCCCGCGCCCGCCCGCCCTGCGCTTCCCTGCGGGCGCCGCTGGCTT  
 GGCTGCCCGCCGACTACAGCTGGTGGTGGGGCGCCGAGCGCGCTCGGGCGCATGACCAGAACCTG  
 GCAAACCTGGCCCTGCAGGCGCTGCGCGACGGGCGAGCGGCTGGGACCGCGACCGGGACAGTTCCGCGT  
 GCGTCGGCTCCCTGCGGCTCCCGGGGCCCGCCAGAGCAGGCGCCCGCGTCCCGGACGGGACGTGC  
 TACCTCTGCGGGCACTGTGCGGGAGCAGGGCCCGCCCGGCAACCCAGAGCGGCCAGGAGCCAAGCCAGG  
 GCTGGCTCCGAGAAGGGCAGTGCCAGCAGCAGGGACGGGAAGACCACCGTGTGGATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212096 representing NM\_020435  
 Red=Cloning site Green=Tags(s)

MTNMSWSFLTRLLEEIHNHSTFVGKVVLTVLVVFRIVL TAVGGEAIYSDEQAKFTCNTRQPGCDNVCYDA  
 FAPL SHRVFVWFQIVVIISTPSVMYLGAVHRLARASEQERRRALRRRPGPRRAPRAHLPPPHAGWPEPAD  
 LGEEEPMLGLGEEEEEEETGAAEGAGEEAEAEAGAEACTKAVGADGKAAGTPGPTGQHDGRRRIQREGLM  
 RYYVAQLVARAAFEVAFVLVGYLLYGFVVRPFPCSRQPCPHVVDVCFVSRPTEKTVFLLVMYVVSCLCLL  
 LNLCEMAHLGLGSAQDAVRGRRPPASAPAPAPRPPPCAFPAAGLACPPDYSLVVRAAERARAHDQNL  
 ANLALQALRDGAAAGDRDRDSSPCVGLPAASRGPPRAGAPASRTGSATSAGTVGEQGRPGTHERPGAKPR  
 AGSEKGSASSRDGKTTVWI

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8114\\_h05.zip](https://cdn.origene.com/chromatograms/mk8114_h05.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_020435

**ORF Size:** 1317 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

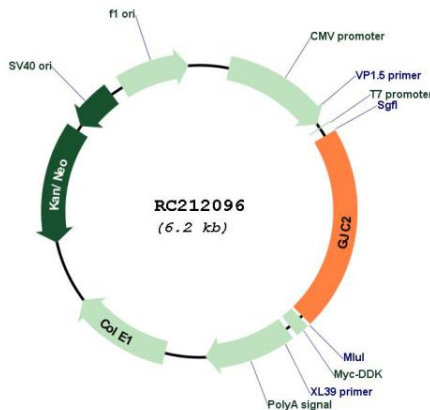
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_020435.4](#)

RefSeq Size: 2411 bp  
 RefSeq ORF: 1320 bp  
 Locus ID: 57165  
 UniProt ID: [Q5T442](#)  
 Cytogenetics: 1q42.13  
 Protein Families: Ion Channels: Other  
 MW: 47 kDa

**Gene Summary:** This gene encodes a gap junction protein. Gap junction proteins are members of a large family of homologous connexins and comprise 4 transmembrane, 2 extracellular, and 3 cytoplasmic domains. This gene plays a key role in central myelination and is involved in peripheral myelination in humans. Defects in this gene are the cause of autosomal recessive Pelizaeus-Merzbacher-like disease-1. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC212096