

## Product datasheet for **RG205109**

### **GJB1 (NM\_000166) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GJB1 (NM_000166) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GJB1
Synonyms:	CMTX; CMTX1; CX32
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205109 representing NM_000166 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGTGGACAGGTTTGTACACCTTGCTCAGTGGCGTGAACCGGCATTCTACTGCCATTGGCCGAGTAT  
GGCTCTCGGTCATCTTCATCTTCAGAATCATGGTCTGGTGGTGGCTGCAGAGAGTGTGTGGGGTATGA  
GAAATCTTCCTTCATCTGCAACACACTCCAGCCTGGCTGCAACAGCGTTTGCTATGACCAATTCTCCCC  
ATCTCCCATGTGCGGCTGTGGTCCCTGCAGCTCATCCTAGTTTCCACCCAGCTCTCCTCGTGGCCATGC  
ACGTGGCTCACCAGCAACACATAGAGAAGAAAATGCTACGGCTTGAGGGCCATGGGGACCCCTACACCT  
GGAGGAGGTGAAGAGGCACAAGTCCACATCTCAGGGACACTGTGGTGGACCTATGTCATCAGCGTGGTG  
TTCCGGCTGTTGTTTGGAGCCGCTTTCATGTATGTCTTTATCTGCTCTACCCTGGCTATGCCATGGTGC  
GGCTGGTCAAGTGCACGCTTACCCCTGCCCAACACAGTGGACTGCTTCGTGTCCCGCCACCCAGGAA  
AACCGTCTTACCGTCTTCATGCTAGCTGCCTCTGGCATCTGCATCATCCTCAATGTGGCCGAGGTGGTG  
TACCTCATCATCCGGCCTGTGCCCGCCGAGCCAGCCGCTCCAATCCACCTTCCCGAAGGGCTCGG  
GCTTCGGCCACCGCCTCTCACCTGAATAACAAGCAGAATGAGATCAACAAGCTGCTGAGTGAGCAGGATGG  
CTCCCTGAAAGACATACTGCGCCGACCCCTGGCACCGGGGCTGGGCTGGCTGAAAAGAGCGACCCGCTGC  
TCGGCCTGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG205109 representing NM\_000166  
 Red=Cloning site Green=Tags(s)

MNWTGLYTLISGVNRHSTAIGRVLVSIFIFRIMVLVVAESVWGDEKSSFICNTLQPGCNSVCYDQFFP  
 ISHVRLWSLQLILVSTPALLVAMHVAHQHIEKKMLRLEGHDPLHLEEVKRHKVHISGLWWTYVISVV  
 FRLLFEAVFMYVFYLLYPGYAMVRLVKCDVYPCPNTVDCFVSRPTEKTVFTVFMLAASGICIIILNVAEVV  
 YLIIRACARRAQRNSPPSRKGSFGHRLSPEYKQNEINKLLEQDGLKDILRRSPGTGAGLAEKSDRC  
 SAC

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000166

**ORF Size:** 849 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\\_000166.6](#)

**RefSeq Size:** 1638 bp

**RefSeq ORF:** 852 bp

**Locus ID:** 2705

**UniProt ID:** [P08034](#)

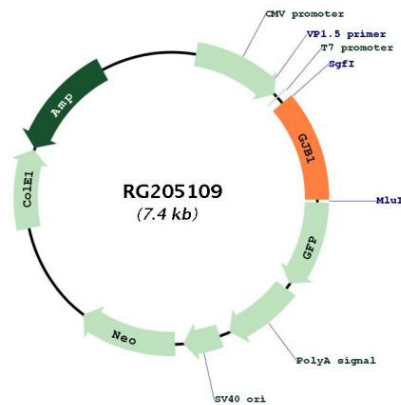
**Cytogenetics:** Xq13.1

**Domains:** CNX

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

**Gene Summary:** This gene encodes a member of the gap junction protein family. The gap junction proteins are membrane-spanning proteins that assemble to form gap junction channels that facilitate the transfer of ions and small molecules between cells. 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 cause X-linked Charcot-Marie-Tooth disease, an inherited peripheral neuropathy. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Oct 2008]

## Product images:



Circular map for RG205109