

Product datasheet for **RG211786**

GJB1 (NM_001097642) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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: >RG211786 representing NM_001097642
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAACTGGACAGGTTTGTACACCTTGCTCAGTGGCGTGAACCGGCATTCTACTGCCATTGGCCGAGTAT
GGCTCTCGGTCACTCTTCATCTTCAGAATCATGGTGGTGGTGGCTGCAGAGAGTGTGTGGGGTGATGA
GAAATCTTCCTTCATCTGCAACACACTCCAGCCTGGCTGCAACAGCGTTTGCTATGACCAATTCTTCCCC
ATCTCCCATGTGCGGCTGTGGTCCCTGCAGCTCATCTAGTTTCCACCCAGCTCTCCTCGTGGCCATGC
ACGTGGCTCACCAGCAACACATAGAGAAGAAAAATGCTACGGCTTGAGGGCCATGGGGACCCCTACACCT
GGAGGAGGTGAAGAGGCACAAGGTCCACATCTCAGGGACACTGTGGTGGACCTATGTCATCAGCGTGGTG
TTCCGGCTGTTGTTGAGGCCGTCTTCATGTATGTCTTTATCTGCTCTACCCTGGCTATGCCATGGTGC
GGCTGGTCAAGTGCAGCTCTACCCCTGCCCAACACAGTGGACTGCTTCGTGTCCCGCCCCACCGAGAA
AACCGTCTTCACCGTCTTCATGCTAGCTGCCTCTGGCATCTGCATCATCTCAATGTGGCCGAGGTGGTG
TACCTCATCATCCGGGCTGTGCCCGCCGAGCCAGCGCCGCTCCAATCCACCTTCCCGCAAGGGCTCGG
GCTTCGGCCACCGCCTCTCACCTGAATAACAAGCAGAATGAGATCAACAAGCTGCTGAGTGAGCAGGATGG
CTCCCTGAAAGACATACTGCGCCGACGCCCTGGACCGGGGCTGGGCTGGCTGAAAAGAGCGACCGCTGC
TCGGCCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG211786 representing NM_001097642

Red=Cloning site Green=Tags(s)

MNWTGLYTLISGVNRHSTAIGRVLSVIFIFRIMVLVVAESVWGDEKSSFICNTLQPGCNSVCYDQFFP
ISHVRLWSLQLILVSTPALLVAMHVAHQHIEKKMLRLEHGDPLHLEEVKRHKVHISGTLWWTYVISV
FRLLFEAVFMYVYLLYPGYAMVRLVKCDVYPCPNTVDCFVSRPTEKTVFTVFLAASGICILNVAEVV
YLIIIRACARRAQRNSPPSRKSGFGHRLSPEYKQNEINKLLSEQDGS�KDILRRSPGTGAGLAEKSDRC
SAC

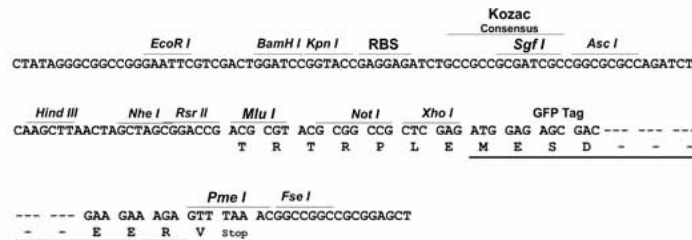
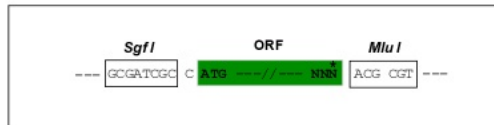
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_001097642

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:

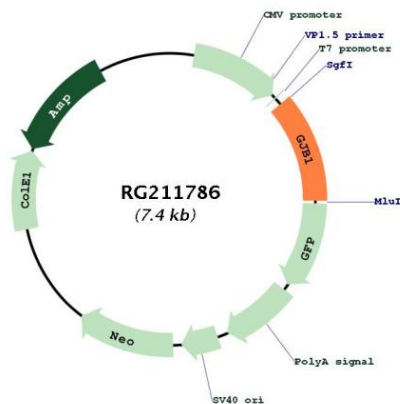
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001097642.2 , NP_001091111.1
RefSeq Size:	1596 bp
RefSeq ORF:	852 bp
Locus ID:	2705
UniProt ID:	P08034
Cytogenetics:	Xq13.1
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 RG211786