

## Product datasheet for **RC213469**

### **GJA8 (NM\_005267) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GJA8 (NM_005267) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GJA8
Synonyms:	CAE; CAE1; CTRCT1; CX50; CZP1; MP70
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC213469 representing NM\_005267  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGCGACTGGAGTTTCTGGGAACATCTTGGAGAGGTGAATGAGCACTCCACCGTCATCGGCAGAG  
 TCTGGCTCACCGTCTTTTCATCTTCCGGATCCTCATCCTTGGCACGGCCGAGAGTTTCGTGTTGGGGGA  
 TGAGCAATCCGACTTCGTGTGCAACACCCAGCAGCCTGGCTGCGAGAACGTCTGTACTACGAGGCGCTTT  
 CCCATCTCCACATTCGCCTCTGGGTGCTGAGATCATCTTCGTCTCCACCCCGTCCCTGATGTACGTGG  
 GGCACGCGGTGCACTACGTCCGCATGGAGGAGAAGCGCAAAGCCGCGAGGCGGAGGAGCTGGGCCAGCA  
 GGCGGGGACTAACGGCGGCCCGACCAGGGCAGCGTCAAGAAGAGCAGCGGCAGCAAAGGCACTAAGAAG  
 TTCGGCTGGAGGGACCCTGCTGAGGACCTACATCTGCCACATCATCTTCAAGACCCTCTTTGAAGTGG  
 GCTTCATCGTGGCCACTACTTCTGTACGGTTCCGGATCCTGCCTCTGTACCGCTGCACCGGTGGCC  
 CTGCCCAATGTGGTGGACTGCTTCGTGTCCCGCCACGAGAAAACCATCTTCATCCTGTTCATGTTG  
 TCTGTGGCCTCTGTGTCCCTATTCTCAACGTGATGGAGTTGGGCCACCTGGGCCTGAAGGGGATCCGGT  
 CTGCCTTGAAAGAGCCTGTAGAGCAGCCCTGGGGGAGATTCTGAGAAAATCCCTCCACTCCATTGCTGT  
 CTCCTCCATCCAGAAAGCCAAGGGCTATCAGCTCCTAGAAGAAGAGAAAATCGTTTTCCACTATTTCCC  
 TTGACCGAGGTTGGGATGGTGGAGACCAGCCACTGCCTGCCAAGCCTTCAATCAGTTCGAGGAGAAGA  
 TCAGCACAGGACCCTGGGGACTTGTCCCGGGCTACCAAGAGACACTGCCTTCTACGCTCAGGTGGG  
 GGCACAAGAAGTGGAGGGCAGGGGCGCCTGCAGAGGAGGGAGCCGAACCCGAGGTGGGAGAGAAGAAG  
 GAGGAAGCAGAGAGGCTGACCACGGAGGAGCAGGAGAAGGTGGCCGTGCCAGAGGGGAGAAAGTAGAGA  
 CCCCCGGAGTGGATAAGGAGGGTGAAGAAGAAGCCGAGTCCGAGAGAAGGTGTCAAAGCAAGGGCTGCC  
 AGCTGAGAAGACACCTTCACTCTGTCCAGAGCTGACAACAGATGATGCCAGCCCTGAGCAGGCTAAGC  
 AAAGCCAGCAGCCGAGCCAGTCAAGCATCTAACCGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213469 representing NM\_005267  
 Red=Cloning site Green=Tags(s)

MGDWSFLGNILEEVNEHSTVIGRWLTVLFIIFRILILGTAAEFVWGDEQSDFCVNTQQPGCENVCYDEAF  
 PISHIRLWVLIIFVSTPSLMYVGHAVHYVRMEEKRSREAEELGQQAGTNGGPDQGSVKKSSGSKGTTK  
 FRLEGTLLRTYIICHIIFKTLFEVGFIVGHYFLYGFRIPLRYCSRWPCPNVDFVSRPTEKTIIFILFML  
 SVASVSLFLNMELGHLGLKGIKRSALRKPVEQPLGEIPEKSLHSIAVSSIQKAKGYQLLEEEKIVSHYFP  
 LTEVGMVETSPLPAKPFNQFEEKISTGPLGDLRSGYQETLPSYAQVGAQEVEGEGPPAEEGAPEVGEKK  
 EEAERLTTEEQEKVAVPEGEKVEPTGVKKEGEEKQSEKYSKQGLPAEKTPSLCPELTTDDARPLSRLS  
 KASSRARSDDLTV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_005267

**ORF Size:** 1299 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).

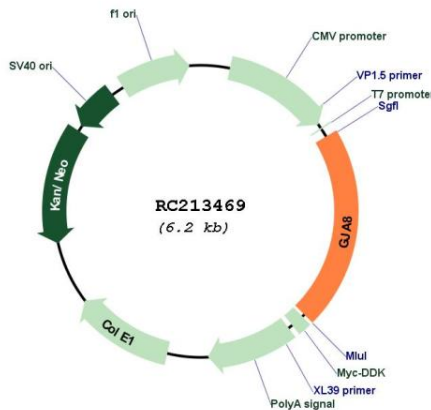
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_005267.5](#)

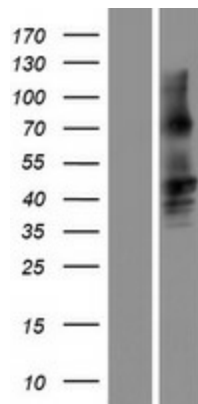
RefSeq Size: 1374 bp  
 RefSeq ORF: 1302 bp  
 Locus ID: 2703  
 UniProt ID: [P48165](#)  
 Cytogenetics: 1q21.2  
 Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane  
 MW: 48 kDa

**Gene Summary:** This gene encodes a transmembrane connexin protein that is necessary for lens growth and maturation of lens fiber cells. The encoded protein is a component of gap junction channels and functions in a calcium and pH-dependent manner. Mutations in this gene have been associated with zonular pulverulent cataracts, nuclear progressive cataracts, and cataract-microcornea syndrome. [provided by RefSeq, Dec 2009]

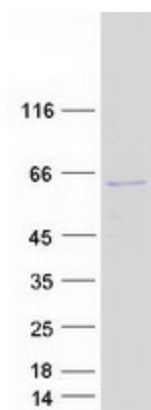
### Product images:



Circular map for RC213469



Western blot validation of overexpression lysate (Cat# [LY417410]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213469 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GJA8 protein (Cat# [TP313469]). The protein was produced from HEK293T cells transfected with GJA8 cDNA clone (Cat# RC213469) using MegaTran 2.0 (Cat# [TT210002]).