

## Product datasheet for RC222438

### Connexin 40.1 (GJD4) (NM\_153368) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Connexin 40.1 (GJD4) (NM_153368) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Connexin 40.1
Synonyms:	CX40.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222438 representing NM_153368 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGGCGTGGACTTGCTAGGGTTTCTCATCATCACATTAAGTGAACGTGACCATGGTGGAAAGC  
TCTGGTTCGTCCTCACGATGCTGCTGCGGATGCTGGTATTGTCTTGGCGGGCGACCCGCTACCAGGA  
CGAGCAGGAGAGGTTTGTCTGCAACACGCTGCAGCCGGATGCGCAATGTTTGTACGACGTCTTCTCC  
CCCGTGTCTCACCTGCGGTTCTGGCTGATCCAGGGCGTGTGCGTCTCTCCCTCCGCCGCTTTCAGCG  
TCTATGTCTGCACCGAGGAGCCAGCTCGCCGCGCTGGGCCCGCGCTGCCCGACCCCGGGAGCC  
GGCCTCCGGGCAGAGACGCTGCCCGCGGCCATTCGGGGAGCGCGCGGCCCTCCAGGTGCCGACTTTTCG  
GCCGGCTACATCATCCACCTCTCTCCGACCTGCTGGAGGCAGCCTTCGGGGCCTTGCACTACTTTC  
TCTTTGGATTCTGGCCCGAAGAAGTCCCTTGACGCGCCCTCCGTGCACGGCGTGGTGGACTGCTA  
CGTGTGCGGGCCACAGAGAAGTCCCTGCTGATGCTGTTCTCTGGGCGGTGACGCGCTGCTTTTCTG  
CTGGGCCCTCGCCGACCTGGTCTGCAGCCTGCGGCGCGGATGCGCAGGAGGCCGGGACCCCAAGCC  
CCTCCATCCGGAAGCAGAGCGGAGCCTCAGGCCACGCGGAGGGACGCCGACTGACGAGGAGGGTGGCG  
GGAGGAAGAGGGGGCACCGGCCCGGGTGCACGCGCGGAGGGGAGGGGGCTGGCAGCCCCAGGCGT  
ACATCCAGGGTGTGAGGGCACGAAGATTCGGATGAGAGTGAGGTGACATCTCCGCCAGCG  
AAAAGCTGGGCAGACAGCCCGGGCAGGCCCCACCGAGAGGCCCGCCAGGACCCAGGGGCTCAGGATC  
CGAGGAGCAGCCCTCAGCAGCCCCAGCCGCTGGCCGCGCCCTTCTGCAGCAGCTGCAGCCCCCT  
GACCCGCTGCCAGTCCAGTGGTCTCCACCTGAGAGCCAGGAAGTCTGAGTGGGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC222438 representing NM\_153368  
Red=Cloning site Green=Tags(s)

MEGVDLLGFLIITLNCNVMTMGKLVFVLTMLLRMLVIVLAGRPVYQDEQERFVCNTLQPGCANVCYDVFS  
 PVSHLRFWLIQGVCVLLPSAVFSVYVLRHGATLAALGPRRCPPREPASGQRRCPRPFGERGGLQVPDFS  
 AGYIIHLLRLTLEAAFALHYFLFGFLAPKFPCTRPCTGVVDCYVSRPTEKSLMLFLWAVSALSFL  
 LGLADLVCSLRRRMRPPPTSPSIRKQSGASGHAEGRRRTDEEGREEEGAPAPPGARAGGEGAGSPRR  
 TSVRSVSGHTKIPDEDESEVTSSASEKLGROPRGRPHREAAQDPRGSGSEEQPSAAPSRLLAAPPSCSSLQPP  
 DPPASSSGAPHLRARKSEWV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8012\\_f10.zip](https://cdn.origene.com/chromatograms/mk8012_f10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_153368

**ORF Size:** 1110 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\\_153368.3](#)

**RefSeq Size:** 1580 bp

**RefSeq ORF:** 1113 bp

**Locus ID:** 219770

**UniProt ID:** [Q96KN9](#)

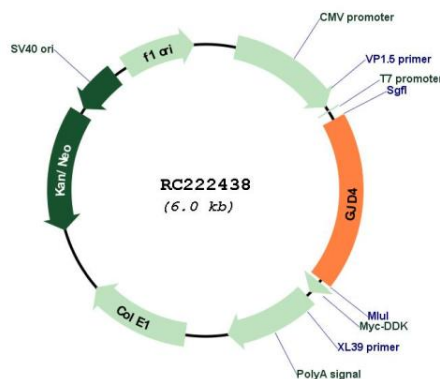
**Cytogenetics:** 10p11.21

**Protein Families:** Transmembrane

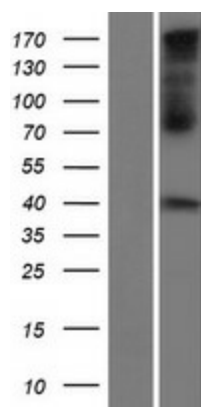
**MW:** 40 kDa

**Gene Summary:** Connexins, such as GJD4, are involved in the formation of gap junctions, intercellular conduits that directly connect the cytoplasm of contacting cells. Each gap junction channel is formed by docking of 2 hemichannels, each of which contains 6 connexin subunits (Sohl et al., 2003 [PubMed 12881038]).[supplied by OMIM, Mar 2008]

## Product images:



Circular map for RC222438



Western blot validation of overexpression lysate (Cat# [LY407080]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222438 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).