

## Product datasheet for **RC230551**

### **CLCN2 (NM\_001171089) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CLCN2 (NM_001171089) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CLCN2
Synonyms:	CIC-2; cIC-2; CLC2; ECA2; ECA3; EGI3; EGI11; EGMA; EJM6; EJM8; HALD2; LKPAT
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC230551 representing NM\_001171089  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGCGCCGCGCGCGCGGAGGAAGGGATGGAGCCACGGGCGCTGCAGTACGAGCAGACCCTGATGTATG  
 GCCGGTACTACTCAGGACCTTGGGGCCTTTGCCAAAGAGGAAGCTGCTCGGATTCGCCTGGGAGGGCCTGA  
 ACCCTGGAAAGGTCCCCCTTCTCTCGGGCTGCCCCAGAGCTCTTGAATATGGACGGAGCCGTTGCGCC  
 CGATGCCGCGTCTGTTCTGTCCGCTGCCACAAGTTCTAGTATCCAGGGTTGGTGAAGATTGGATCTTCC  
 TGGTCTGCTGGGGCTTCTCATGGCATTGGTCAGCTGGGTGATGGACTATGCCATTGCTGCCTGTCTGCA  
 AGCCAGCAGTGGATGTCCCGGGCTTGAACACCAGCATCTTGTCCAGTACCTGGCCTGGGTACCTAC  
 CCTGTTGCTCATCACTTTCTCAGCCGGATTACACAGATCCTGGCCCTCAGGCTGTCGGCTCTGGCA  
 TCCCTGAGATGAAGACCATCTTGGGGGAGTGGTGTGAAAGAATACCTCACACTCAAGACCTTTATAGC  
 TAAGGTCAATTGGGCTGACCTGCGCCCTAGGCAGCGGGATGCCGCTTGGCAAAGAGGGCCCTTTGTGCAT  
 ATCGCAAGCATGTGTGCTGCCCTTCTCAGCAAGTTCTCTCCCTCTTTGGGGGTATCTATGAGAATGAAT  
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 AGGCGTCTCTTACAGCATCGAGGTACCTCCACCTTCTTTCAGTGCAGGAACTACTGGCGGGCTTCTTC  
 GCTGCCACCTTACAGTGCCTTCACTTCCGGGTCTTGGCAGTCTGGAACCGGGATGAAGAGACTATTACAG  
 CCCTCTTCAAACCCGATTCCGGCTCGACTTCCCTTTGACCTGCAGGAGCTGCCAGCCTTTGCTGTCA  
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 AAGCAGAAAACCATCAATCGCTTCTCATGAGGAAACGCTGCTTCCCGGCTCTGGTACCCTGCTCA  
 TCTCCACGCTGACCTTCCCCCTGGCTTTGGACAGTTTTCAGTGGTGGACAGCTCTCACAGAAAGAGAGC  
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 AGCATTGGGGCTCTGGTGGGTGAAAGCATGGCTGCCTGGTTCAGATGGAATTCATACGGACAGCAGC  
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 CAGTGTCCACGGCTGTGATCGTGTTCGAGCTCACAGGCCAGATTGCCACATCTGCCTGTGATGATCGC  
 CGTCATCTGGCCAACGCTGTGCGCCAGAGTCTGCAGCCCTCCCTCTATGACAGCATCATCGAATCAAG  
 AAAGTCCCTACCTGCCTGAGCTCGGCTGGGGCCGCCACCAGCAGTACCGGGTGCCTGTGGAGGACATCA  
 TGGTGGGGATGTTCCCATGTGCCCTCAGCTGCACCTTCCGGGACCTGCGTTTGGCACTGCACAGGAC  
 CAAGGGCCGAATGCTGGCCCTAGTGGAGTCCCCTGAGTCCATGATTCTGCTGGGCTCCATCGAGCGTTCA  
 CAGGTGGTGGCATTGTTGGGGGCCAGCTGAGCCAGCCCGCCGGCGGCAGCACATGCAGGAGCGCAGAG  
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 AGGGGGCCAGTGTACCAGGAACCTCGGAGAGAGTCCCACAGGGAGCGCAGAGTCCGCAGGCATCGCCC  
 TCCGGAGCCTCTTCTGTGGCAGTCCACCCCTGAGGCTGCTTCGGAGAAGTTGGAATCCTGTGAGAAGCG  
 CAAGCTGAAGCGTGTCCGAATCTCCCTGGCAAGTGACGCGGACCTGGAAGGCGAGATGAGCCCTGAAGAG  
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 GGGTGTGAAAGTCCGGCCGCCCTCGCCAGCTTCCGAGACAGTGCACCAGCAGCAGTGACACGGAGACC  
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 GCGACGACAAATGCCAA

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230551 representing NM\_001171089  
 Red=Cloning site Green=Tags(s)

MAAAAAEEGMEPRALQYEQTLMYGRYTQDLGAFAKEEAARIRLGGPEPWKPPSSRAAPELLEYGRSRCA  
 RCRVCSVRCHKFLVSRVGEDWIFLVLLGLLMALVSWMDYAIACLQAQQWMSRGLNTSILLQYLAWVTY  
 PVVLITFSAGFTQILAPQAVGSGIPEMKTILRGVVLEKEYLTKTFIAKVIGLTCALGSGMPLGKEGPFVH  
 IASMAALLSKFLSLFGGIYENESRNTMLAAACAVGVGCCFAAPIGGVLSIEVTSTFFAVRNYWRGFF  
 AATFSAFIFRVLAVWNRDEETITALFKTRFRDLDFPDLQELPAFAVIGIASGFGGALFVYLNKIVQVMR  
 KQKTINRFLMRKRLLPALVTLTISTLTFPPGFQFMAGQLSQKETLVTLFDNRTWVRQGLVEELEPPST  
 SQAWNPPRANVFLTLVIFILMKFWMSALATTIPVPCGAFMPVFVIGAAFGRLVGESMAAWFPDGIHTDSS  
 TYRIVPGGYAVVGAALAGAVTHTVSTAVIVFELTGQIAHILPVMIAVILANAVAQSLQPSLYDSIIRIK  
 KLPYLPGLGWGRHQYRVRVEDIMVRDVPHVALSCTFRDLRLALHRTKGRMLALVESPEMILLGSIERS  
 QVVALLGAQLSPARRRQHMQRATQTSPLSDQEGPPTPEASVCFQVNTEDSAFPAARGETHKPLKPAK  
 RGPVTRNLGESPTGSAESAGIALRSLFCGSPPEAASEKLESCERKLRVRIASLADLEGEMSPPE  
 ILEWEEQQLDEPVNFSACKIDPAPFQLVERTSLHKLKAIEGSVTAQGVKVRPPLASFRDSATSSSDTET  
 TEVHALWGPHSRHLPREGSPSDSDDKCG

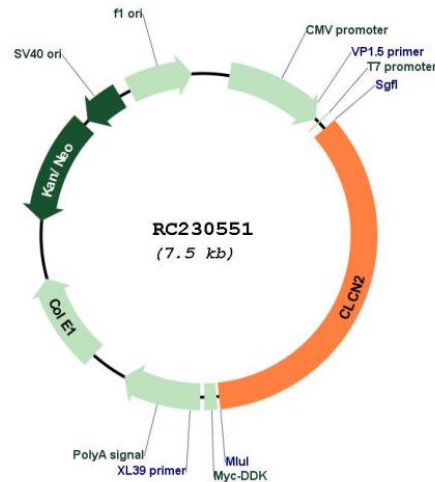
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001171089

**ORF Size:** 2607 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\\_001171089.3](#)

**RefSeq Size:** 3212 bp

**RefSeq ORF:** 2610 bp

**Locus ID:** 1181

**UniProt ID:** [P51788](#)

**Cytogenetics:** 3q27.1

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

**MW:** 95.4 kDa

**Gene Summary:** This gene encodes a voltage-gated chloride channel. The encoded protein is a transmembrane protein that maintains chloride ion homeostasis in various cells. Defects in this gene may be a cause of certain epilepsies. Four transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2012]