

Product datasheet for **RG230551**

CLCN2 (NM_001171089) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLCN2 (NM_001171089) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CLCN2
Synonyms:	CIC-2; cIC-2; CLC2; ECA2; ECA3; EGI3; EGI11; EGMA; EJM6; EJM8; HALD2; LKPAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230551 representing NM_001171089
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGCCGCGCGCGCGGAGGAAGGGATGGAGCCACGGGCGCTGCAGTACGAGCAGACCCTGATGTATG
 GCCGGTACTACTCAGGACCTTGGGGCCTTTGCCAAAGAGGAAGCTGCTCGGATTCGCCTGGGAGGGCCTGA
 ACCCTGGAAAGGTCCCCCTTCTCTCGGGCTGCCCCAGAGCTCTTGAATATGGACGGAGCCGTTGCGCC
 CGATGCCGCGTCTGTTCTGTCCGCTGCCACAAGTTCTAGTATCCAGGGTTGGTGAAGATTGGATCTTCC
 TGGTCTGCTGGGGCTTCTCATGGCATTGGTCAGCTGGGTGATGGACTATGCCATTGCTGCCTGTCTGCA
 AGCCCAGCAGTGGATGTCCCGGGCTTGAACACCAGCATCTTGTCCAGTACCTGGCCTGGGTACCTAC
 CCTGTTGTCTCATCACTTTCTCAGCCGGATTACACAGATCCTGGCCCTCAGGCTGTCGGCTCTGGCA
 TCCCTGAGATGAAGACCATCTTGCGGGGAGTGGTGTGAAAGAATACCTCACACTCAAGACCTTTATAGC
 TAAGGTCAATTGGGCTGACCTGCGCCCTAGGCAGCGGGATGCCGCTTGGCAAAGAGGGCCCTTTTGTGCAT
 ATCGCAAGCATGTGTGCTGCCCTTCTCAGCAAGTTCTCTCCCTCTTGGGGGTATCTATGAGAATGAAT
 CCCGGAACACAGAGATGCTGGCTGCCGCCTGTGCCGTGGGGTGGGCTGTGCTTCGCGGCACCTATTGG
 AGGCGTCTCTTACAGCATCGAGGTACCTCCACCTTCTTTCAGTGCAGGAACTACTGGCGGGCTTCTTC
 GCTGCCACCTTACAGTGCCTTCACTTCCGGGTCTTGGCAGTCTGGAACCGGGATGAAGAGACTATTACAG
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 TGGTATTGCTAGTGGCTTCGGTGGAGCCCTCTTGTCTACCTGAACCGGAAGATTGTCCAGGTGATGCGG
 AAGCAGAAAACCATCAATCGCTTCTCATGAGGAAACGCTGCTTCCCGGCTCTGGTACCCTGCTCA
 TCTCCACGCTGACCTTCCCCCTGGCTTTGGACAGTTTCACTGGCTGGACAGCTCTCACAGAAAGAGACG
 GGTCAACCCTGTTTGAACAATCGGACGTGGGTCCGCCAGGGCTGGTGGAGGAGCTAGAACCACCCAGCACC
 TCACAGGCTGGAACCCACCACGTGCCAACGTCTTCTCACCTGGTCACTTCTCATGAAGTTCT
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 ACCTACCGGATTGTGCTGGGGCTACGCTGTGGTCCGGGCGAGCTGCGCTGGCAGGAGCGGTGACACACA
 CAGTGTCCACGGCTGTGATCGTGTTCGAGCTCACAGGCCAGATTGCCACATCTGCCTGTGATGATCGC
 CGTCATCTGGCCAACGCTGTGCGCCAGAGTCTGCAGCCCTCCCTCTATGACAGCATCATCCGAATCAAG
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 CCTTCCAGCTGGTGGAGCGGACCTTTTGCACAAGCTCCGGAAGGCCATCGAGGGCTCTGTACAGCACA
 GGGTGTGAAAGTCCGGCCGCCCTCGCCAGCTTCCGAGACAGTGCACCAGCAGCAGTGACACGGAGACC
 ACTGAGGTGCATGCACTCTGGGGCCCCACTCCCGTCAATGGCCTCCCCGGGAGGGCAGCCCTTCCGACA
 GCGACGACAAATGCCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG230551 representing NM_001171089
 Red=Cloning site Green=Tags(s)

MAAAAAEEGMEPRALQYEQTLMYGRYTQDLGAFAKEEAARIRLGGPEPWKGPPSSRAAPELLEYGRSRCA
 RCRVCSVRCHKFLVSRVGEDWIFLVLLGLLMALVSWMDYAIACLQAQQWMSRGLNTSILLQYLAWVTY
 PVVLITFSAGFTQILAPQAVGSGIPEMKTILRGVVVKEYLTKTFIAKVIGLTCALGSGMPLGKEGPFVH
 IASMAALLSKFLSLFGGIYENESRNTTEMLAAACAVGVGCCFAAPIGGVLSIEVTSTFFAVRNYWRGFF
 AATFSAFIFRVLAVWNRDEETITALFKTRFRDLDFPDLQELPAFAVIGIASGFGGALFVYLNKIVQVMR
 KQKTINRFLMRKRLLPALVTLISTLTFPPGFQFMAGQLSQKETLVTLFDNRTWVRQGLVEELEPPST
 SQAWNPPRANVFLTLVIFILMKFWMSALATTIPVPCGAFMPVFI GAAGFRLVGESMAAWFPDGIHTDSS
 TYRIVPGGYAVVGAALAGAVTHTVSTAVIVFELTGQIAHILPVMIAVILANAVAQSLQPSLYDSIIRIK
 KLPYLPGLGWGRHQYRVRVEDIMVRDVPHVALSCTFRDLRLALHRTKGRMLALVESPEMILLGSIERS
 QVVALLGAQLSPARRRQHMQRATQTSPLSDQEGPPTPEASVCFQVNTEDSAFPAARGETHKPLKPAK
 RGPVTRNLGESPTGSAESAGIALRSLFCGSPPEAASEKLESCEKRKLKRVRI SLASDADLEGEMSP
 ILEWEEQQLDEPVNFS DCKIDPAPFQLVERTSLHKLKAI EGSVTAQGVKVRPPLASFRDSATSSSDTET
 TEVHALWGPHSRHGLPREGSPSDSDDKCQ

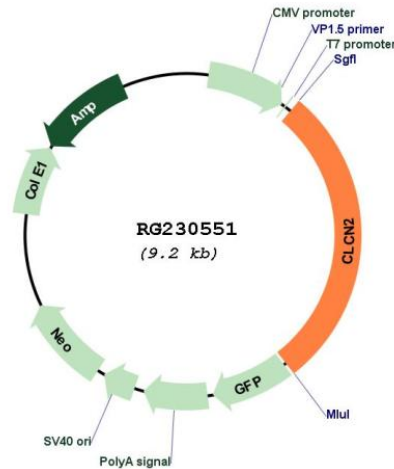
TRTRPLE - GFP Tag - V

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

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]