**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for SC310074

## CLCN3 (NM_173872) Human Untagged Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CLCN3 (NM_173872) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | CLCN3 |
| **Synonyms:** | ClC-3; CLC3 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

View online »

**Fully Sequenced ORF:**

>SC310074 representing NM_173872.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTA
CCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCC
ATGGAGTCTGAGCAGCTGTTCCATAGAGGCTACTATAGAAACAGCTACAACAGTATAACAAGTGCAAGT
AGTGATGAGGAACTTTTAGATGGAGCAGGTGTTATTATGGACTTTCAAACATCTGAAGATGACAATTTA
TTAGATGGTGACACTGCAGTTGGAACTCATTATACAATGACAAATGGAGGCAGCATTAACAGTTCTACA
CATTTACTGGATCTTTTGGATGAACCAATTCCAGGTGTTGGTACATATGATGATTTCCATACTATTGAT
TGGGTGCGAGAAAAATGTAAAGACAGAGAAAGGCATAGACGGATCAACAGCAAAAAGAAAGAATCAGCA
TGGGAAATGACAAAAAGTTTGTATGATGCGTGGTCAGGATGGCTAGTAGTAACACTAACAGGATTGGCA
TCAGGGGCACTGGCCGGATTAATAGACATTGCTGCCGATTGGATGACTGACCTAAAGGAGGGCATTTGC
CTTAGTGCGTTGTGGTACAACCACGAACAGTGCTGTTGGGGATCTAATGAAACAACATTTGAAGAGAGG
GATAAATGTCCACAGTGGAAAACATGGGCAGAATTAATCATAGGTCAAGCAGAGGGTCCTGGTTCTTAT
ATCATGAACTACATAATGTACATCTTCTGGGCCTTGAGTTTTGCCTTTCTTGCAGTTTCCCTGGTAAAG
GTATTTGCTCCATATGCCTGTGGCTCTGGAATTCCAGAGATTAAAACTATTTTAAGTGGATTCATCATC
AGAGGTTACTTGGGAAAATGGACTTTAATGATTAAAACCATCACATTAGTCCTGGCTGTGGCATCAGGT
TTGAGTTTAGGAAAAGAAGGTCCCCTGGTACATGTTGCCTGTTGCTGCGGAAATATCTTTTCCTACCTC
TTTCCAAAGTATAGCACAAACGAAGCTAAAAAAAGGGAGGTGCTATCAGCTGCCTCAGCTGCAGGGGTT
TCTGTAGCTTTTGGTGCACCAATTGGAGGAGTTCTTTTTAGCCTGGAAGAGGTTAGCTATTATTTTCCT
CTCAAAACTTTATGGAGATCATTTTTTGCTGCTTTAGTGGCTGCATTTGTTTTGAGGTCCATCAATCCA
TTTGGTAACAGCCGTCTGGTCCTTTTTTATGTGGAGTATCATACACCATGGTACCTTTTTGAACTGTTT
CCTTTTATTCTTCTAGGGGTATTTGGAGGGCTTTGGGGAGCCTTTTTCATTAGGGCAAATATTGCCTGG
TGTCGTCGACGCAAGTCCACGAAATTTGGAAAGTATCCCGTTCTGGAAGTCATTATTGTTGCAGCCATT
ACTGCTGTGATAGCCTTCCCTAATCCATACACTAGGCTAAACACCAGTGAACTGATCAAAGAGCTTTTT
ACAGACTGTGGTCCCCTGGAATCCTCTTCTCTTTGTGACTACAGAAATGACATGAATGCCAGTAAAATT
GTCGATGACATTCCTGATCGTCCAGCAGGCATTGGAGTATATTCAGCTATATGGCAGTTATGCCTGGCA
CTCATATTTAAAATCATAATGACAGTATTCACTTTTGGCATCAAGGTTCCATCAGGCTTGTTCATCCCC
AGCATGGCCATTGGAGCGATCGCAGGAAGGATTGTGGGGATTGCGGTGGAGCAGCTTGCCTACTATCAC
CACGACTGGTTTATCTTTAAGGAGTGGTGTGAGGTCGGGGCTGATTGCATTACACCTGGCCTTTATGCC
ATGGTTGGTGCTGCTGCATGCTTAGGTGGTGTGACAAGAATGACTGTCTCCCTGGTGGTTATTGTTTTT
GAGCTTACTGGAGGCTTGGAATATATTGTTCCCCTTATGGCTGCAGTCATGACCAGTAAATGGGTTGGA
GATGCCTTTGGCAGGGAAGGCATTTATGAAGCACACATCCGATTAAATGGATACCCTTTCTTGGATGCA
AAAGAAGAATTCACTCATACCACCCTGGCTGCTGACGTTATGAGACCTCGAAGGAATGATCCTCCCTTA
GCTGTCCTGACACAGGACAATATGACAGTGGATGATATAGAAAACATGATTAATGAAACCAGCTACAAT
GGATTTCCTGTCATAATGTCAAAAGAATCTCAGAGATTAGTGGGATTTGCCCTCAGAAGAGACCTGACA
ATTGCAATAGAAAGTGCCAGGAAAAAACAAGAAGGTATCGTTGGCAGTTCTCGGGTGTGTTTTGCACAG
CACACCCCATCTCTTCCAGCAGAAAGTCCTCGGCCATTGAAGCTTCGAAGCATTCTTGACATGAGCCCT
TTTACAGTGACAGACCACACCCCAATGGAGATCGTGGTGGATATTTTCCGAAAGCTGGGACTGAGGCAG
TGCCTTGTAACTCACAATGGGATTGTCTTGGGGATCATCACAAAGAAGAACATATTAGAGCATCTCGAG
CAACTAAAGCAGCACGTCGAACCCTTGGCGCCTCCTTGGCATTATAACAAAAAAAGATATCCTCCGGCA
TATGGCCCAGACGGCAAACCAAGACCCCGCTTCAATAATGTTCAACTGAATCTCACAGATGAGGAGAGA
GAAGAAACGGAAGAGGAAGTTTATTTGTTGAATAGCACAACTCTTTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** AscI-MluI

**Plasmid Map:**

**ACCN:** NM_173872

**Insert Size:** 2601 bp

| | |
|---|---|
| **OTI Disclaimer:** | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| **OTI Annotation:** | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_173872.3 |
| **RefSeq Size:** | 6299 bp |
| **RefSeq ORF:** | 2601 bp |
| **Locus ID:** | 1182 |
| **UniProt ID:** | P51790 |
| **Cytogenetics:** | 4q33 |
| **Protein Families:** | Druggable Genome, Ion Channels: Other, Transmembrane |
| **MW:** | 96.7 kDa |

**Gene Summary:** This gene encodes a member of the voltage-gated chloride channel (ClC) family. The encoded protein is present in all cell types and localized in plasma membranes and in intracellular vesicles. It is a multi-pass membrane protein which contains a ClC domain and two additional C-terminal CBS (cystathionine beta-synthase) domains. The ClC domain catalyzes the selective flow of Cl- ions across cell membranes, and the CBS domain may have a regulatory function. This protein plays a role in both acidification and transmitter loading of GABAergic synaptic vesicles, and in smooth muscle cell activation and neointima formation. This protein is required for lysophosphatidic acid (LPA)-activated Cl- current activity and fibroblast-to-myofibroblast differentiation. The protein activity is regulated by Ca(2+)/calmodulin-dependent protein kinase II (CaMKII) in glioma cells. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011] Transcript Variant: This variant (e) has an additional exon in the 3' coding region, which results in frame-shift, compared to variant b. The resulting isoform (e) has a longer and distinct C-terminus, compared to isoform b. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.