

Product datasheet for **SC110856**

CLCN3 (NM_001829) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CLCN3 (NM_001829) Human Untagged Clone
Tag: Tag Free
Symbol: CLCN3
Synonyms: CIC-3; CLC3
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_001829 edited
GAGGCTTTCCAGTGTCTAGTTCGCCCGTACCCGGAATAATGAGCAAGGAGGGTGTGG
TGGGTTGAAAGCCATCTACTTTACTCCCGAGTTAGAGCATGGATTTCAGTTTTAGTCTTA
AGGGGGAAGTGAGATTGGAGATTTTTATTTTAAATTTTGGGCAGAAGCAGGTTGACTCTA
GGGATCTCCAGAGCGAGAGGATTTAACTTCATGTTGCTCCCGTGTGGTGAAGGAGGACAAT
AAAAGTCCACCGGGCAAATTTTCGTAACCTCTGCGGTAGAAAACGTCAGGTATCTTTT
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CTATGTCTCTGAGCTGCGAGATAATCAGACAGCTAAATGGAGTCTGAGCAGCTGTCCAT
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CAGTGAAAAACATGGGCAGAATTAATCATAGGTCAAGCAGAGGGTCTGGTTCTTATATC
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CCAATTGGAGGAGTTCTTTTAGCCTGGAAGAGGTTAGCTATTATTTCTCTCAAACT
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TTTGGTAACAGCCGCTGGTCTTTTTTATGTGGAGTATCATACACCATGGTACCTTTTT
GAACTGTTTCCTTTTATTCTTCTAGGGTATTTGGAGGGCTTTGGGGAGCCTTTTTTCATT
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ACTGGATGCATTAGCTGAGGATGTGCCTGATAGTGCAGGCTTGCCTCAACAGAGATG
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_001829 unedited
GCCCATTTAGTTATACGACTCACTATAGCGCGCCGCGNAATTCGCACGAGGCTTTCCAG
TGTTCTAGTTCGCCCCTGACCCGGGATAATGAGCAAGGAGGGTGTGGTGGTTGAAAGCC
ATCCTACTTTACTCCCGAGTTAGAGCATGGATTGAGTTTATGCTTAAGGGGGAAGTGA
ATTGGAGATTTTTATTTTAAATTTGGGCAGAAGCAGGTTGACTCTAGGGATCTCCAGAG
CGAGAGGATTTAACTTCAATGTTGCTCCCGTGTGTTGAAGGAGGACAATAAAAGTCCCACCG
GGCAAAATTTTCGTAACCTCTGCGGTAGAAAACGTCAGGTATCTTTTAAATCGCGATAGT
TTTCGCTGTGTCAGGCTTTCTTCGGTGGAGCTCCGAGGGTAGCTAGGTTCTAGGTTTGAA
ACAGATGCAGAATCCAAAGGCAGCGCAAAAACAGCCACCGATTTTGCTATGTCTCTGAG
CTGCGAGATAATCAGACAGCTAAATGGAGTCTGAGCAGCTGTTCCATAGAGGCTACTATA
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GTGTTATTATGGACTTTCAAACATCTGAAGATGACCATTTATTAGATGGTACTGACACTGCAG
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ATCTTTTGGATGACCCATTCCAGTGTGGTACATATGATGATTTCCATACTATTGGATGG
GTGCCAGAAAATGCTAAGACAGAGAAGGCATATACGGGTCAACAGCAAAAAGAAGATCA
GCCTGGGAAATGACACAAGTTNGTTTGTGCGCTGTCCAGAGGCTCTANTAACACTACC
AGATGGCCTCAGGGCCCTGGCCCCGATAATGGACTGCG
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_001829 unedited GGGTTAGCTTGNCCGCGGCCGATTCTANGATCGAGTTTTTTTTTTTTTTTTTTGTATTT TATAAATTTAATCCATAAAAAATATAAATAAGAATGGTAAATTTTAAAGAAAAAATAT ACATTTAGTGCAAGTTATGAATTACATTTCTTCTTCAGTGTGAGCCATGAGACATCTTGA GAAAAGAAAAGAATGACTGATCTAATTTCAATTTAAAAATTCCAGTGTTTTAAACATGCA ATTAATACCAGATACAGCTAATCAGAATACTTCCTTCTCTTACTGTCAAAGCAGCAGCA TTTTATTTAATTATGCTCAACAGCACTTGTATATCATAGTAGTAGTCTTAGAAAATAGAAA ATTTGCATAAGACCCGGTACATTATCCATAAAGTCTGAGAGGAAAAACAAAAAGAAAAC TTTATCCTTTAAAACCAAGCTTCATTGTTTTCGGTTTTGATCCACACGGCACACAATGAG AGATTTGTTCTCGCTTCTTCGAGACTTTACCTGTTTGTGAGCCTTTGTTGTGGTGCA TGTGACTGTTCCAAGCATTTAGTGATGGTACAACTACATGGTTAATGGCACAAGAAAAC ACTCCCTTCTGTGATGAAACCTCAGTAAAATCACAGTACATCTCAATATGAGAAAGGAC TGCTTCAAAGGATACACCGATTTAAAGAGGCTTTGTTACAGCTCACTCNAGAGAGAGAG AGAGAGAGAGAGAGAAAATAAAGGCTTCTGGAATGTAGAAAGGATGGCTTAACTA TACAATTCATGAATTAACAGAACAGTTTTGATTAATAAAAAAGGCCAGCACCTTGAAG TTTATAGATGGCTCAATTCAAAAGTATCCCTTCTAGAATAGGGACCTGATATGTGCTTT GCATGTTGAACACAGCCAGTCTCGAGGACTCTGCTGTCATTC
Restriction Sites:	NotI-NotI
ACCN:	NM_001829
Insert Size:	4200 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).
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:	<ol style="list-style-type: none"> 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:	<u>NM_001829.2</u> , <u>NP_001820.2</u>
RefSeq Size:	3982 bp
RefSeq ORF:	2457 bp
Locus ID:	1182
UniProt ID:	<u>P51790</u>
Cytogenetics:	4q33
Domains:	CBS, voltage_CLC
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane

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 Ca²⁺/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 (b) represents the predominant transcript and encodes 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.