

## Product datasheet for **RC234881**

### CLCN3 (NM\_001243372) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CLCN3 (NM_001243372) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CLCN3
Synonyms:	CIC-3; CLC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC234881 representing NM\_001243372  
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
 GCCC

ATGGAGTCTGAGCAGCTGTTCCATAGAGGCTACTATAGAACAGCTACAACAGTATAACAAGTGCAAGTA  
 GTGATGAGGAACCTTTAGATGGAGCAGGTGTTATTATGGACTTTCAAACATCTGAAGATGACAATTTATT  
 AGATGGTGACACTGCAGTTGGAACCTATTATACAATGACAAATGGAGGCAGCATTAAACAGTTCTACACAT  
 TTAAGTGGATCTTTGGATGAACCAATCCAGGTGTTGGTACATATGATGATTTCCATACTATTGATTGGG  
 TGCGAGAAAAATGTAAAGACAGAGAAAGGCATAGACGGATCAACAGCAAAAAGAAAGAAATCAGCATGGGA  
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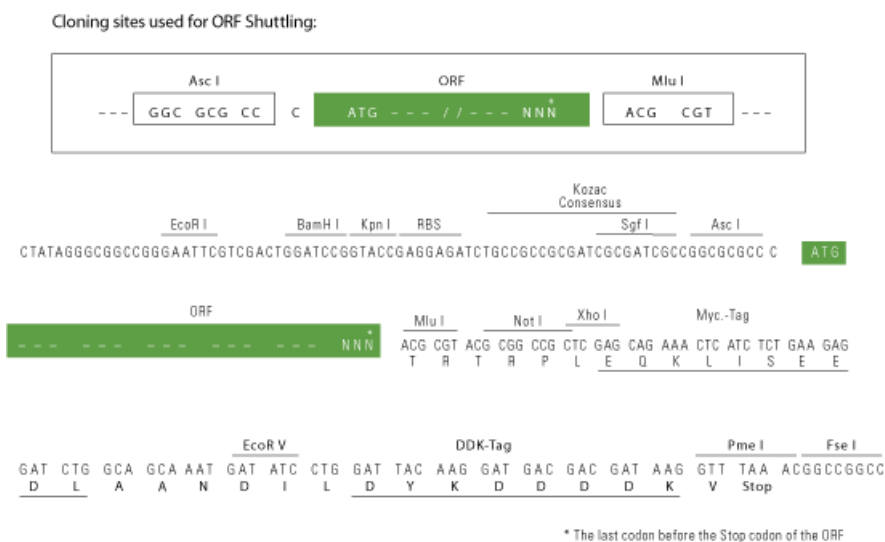
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234881 representing NM\_001243372  
Red=Cloning site Green=Tags(s)

MESEQLFHRGYRNSYNSITSASSDEELLDGAGVIMDFQTSDDNLLDGDТАVGTHYMTNGGSINSSTH  
LLDLLDEPIPGVGTYYDDFHTIDWVREKCKDRERHRRINSKKKESAWEMTKSLYDAWSGWL VVTLTGLASG  
ALAGLIDIAADWMTDLKEGICLSALWYNHEQCCWGSNETTFEERDKCPQWKTWAEIIGQAEGPGSYIMN  
YIMYIFWALSFAFLAVSLVKVFAPYACGSGIPEIKTILSGFIIRGYLGKWTLMIKTITLVLAVASGLSLG  
KEGPLVHVACCCGNIFSYLEPKYSTNEAKKREVSYYFPLKTLWRSFFAALVAAFVLR SINPF GNSRLVLF  
YVEYHTPWYLFELFPFILLGVFGGLWGAF FIRANIAWCRRRKSTKFGKYPVLEVIIVAAITAVIAFPNPY  
TRLNTSELIKELFTDCGPLESSSLCDYRNDMNASKIVDDIPDRPAGIGVYS AIWQLCLALIFKIIMTVFT  
FGIKVPSGLFIP SMAIGA IAGRIVGIAVEQLAYYHHDWFIFKEWCEVGADCITPGLYAMVGAACLGGVT  
RMTVSLVVIVFELTGGLEYIVPLMAAVMTSKWVGDAFGREGIYEAHIRLNGYPFLDAKEEFTHHTLAADV  
MRPRRNDPPLAVLTQDNMTVDDIENMINETS YNGFPVIMSKESQRLVGFALRRDLTIAIESARKKQEGIV  
GSSRVCF AQHTPSLPAESPRPLKLR SILD MSPFTVTDHTPMEIVVDIFRKLGLRQCLVTHNGRLLGIITK  
KDILRHMAQTANQDPASIMFN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: AscI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001243372

**ORF Size:** 2373 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\\_001243372.2](#)

**RefSeq Size:** 6142 bp

**RefSeq ORF:** 2376 bp

**Locus ID:** 1182

**UniProt ID:** [P51790](#)

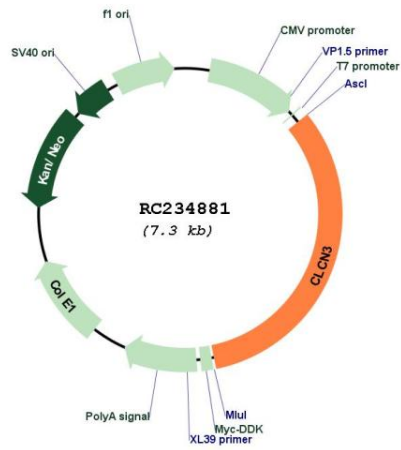
**Cytogenetics:** 4q33

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

**MW:** 88.9 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<sup>-</sup> 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<sup>-</sup> current activity and fibroblast-to-myofibroblast differentiation. The protein activity is regulated by Ca<sup>2+</sup>/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]

Product images:



Circular map for RC234881