

Product datasheet for **RC226163**

CLC7 (CLCN7) (NM_001114331) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLC7 (CLCN7) (NM_001114331) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CLC7
Synonyms:	CLC-7; CLC7; HOD; OPTA2; OPTB4; PPP1R63
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC226163 representing NM_001114331
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCAACGTCTCTAAGAAGGTGTCCTGGTCCGGCCGGGACCGGGACGACGAGGAGCGGCCCGCTGC
TGCAGAGGACGGCGCGGCCCGGGGGACCGCGCTGCTGAACGGGGCTGGGCCTGGGGCTGCGCGCCA
GGATATGGACCTCCACATCCCTTCCCCAAGGAGATCCCACACAACGAGAAGCTCCTGTCCCTCAAGTAT
GAGAGCTTGGACTATGACAACAGTGAGAACCAGCTGTTCTGGAGGAGGAGCGGGGATCAATCACACGG
CCTTCCGACGGTGGAGATCAAGCGCTGGGTCACTGCGCCCTCATTGGGATCCTCACGGCCTCGTGGC
CTGCTTCAATGACATCGTGGTGGAAAACCTGGCTGGCCTCAAGTACAGGGTCAAGGGCAATATCGAC
AAGTTCACAGAGAAGGGCGGACTGTCCTTCTCCCTGTTGCTGTGGCCACGCTGAACGCCCTTCGTGC
TCGTGGGCTCTGTGATTGTGGCTTTCATAGAGCCGGTGGCTGCTGGCAGCGGAATCCCCAGATCAAGT
CTTCTCAACGGGGTGAAGATCCCCACGTGGTGGGCTCAAGACGTTGGTGATCAAAGTGTCCGGTGTG
ATCCTGTCCGTGGTGGGGCCCTGGCCGTGGGAAAGGAAGGGCCGATGATCCACTCAGGTTCAAGTATTG
CCGCCGGGATCTCTCAGGGAAGGTCAACGTCACTGAAACGAGATTTCAAGATCTTCGAGTACTTCGCAG
AGACACAGAGAAGCGGGACTTTCGTCTCCGACGGGGCTGCGGCCGGAGTGTGAGCGGCTTTGGAGCCCC
GTGGGTGGGGCTCTGTTGAGCTTGGAGGAGGTGCGTCTTCTGGAACGAGTTCCTGACCTGGAGGATCT
TCTTTGCTCCATGATCTCCACGTTACCCCTGAATTTGTTCTGAGCATTACCACGGGAACATGTGGGA
CCTGTCCAGCCCAGGCCATCAACTTCGGAAGGTTTACTCGGAGAAAATGGCCTACACGATCCACGAG
ATCCCGGCTTTCATCGCCATGGCGTGGTGGGCGGTGTGCTTGGAGCAGTGTCAATGCCTTGAAGTACT
GGCTGACCATGTTTGAATCAGTACATCCACCGCCCTGCCTGCAGGTGATTGAGGCCGTGCTGGTGGC
CGCGTACGGCCACAGTTGCCTTCGTGCTGATCTACTCGTCGCGGGATTGCCAGCCCCTGCAGGGGGC
TCCATGTCTACCCGCTGCAGCTCTTTTGTGAGATGGCGAGTAACTCCATGGCTGCGCCCTTCTTCA
ACACCCGGAGAAGAGCGTGGTGGAGCTTCCACGACCCGCCAGGCTCTACAACCCCTGACCCTCGG
CCTGTTACGCTGGTCTACTTCTTCTGGCCTGCTGGACCTACGGGCTCACGGTGTCTGCCGGGGTCTTC
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CGGCGATCTGGGCGGACCCGGCAAATACGCCCTGATGGGAGTGTGCCCAGCTGGGCGGGATTGTGCG
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CTGGTGTCTATGACCGCAAGATCGTGGGCGACGCTTTCATTGAGGGCCTGTACGACATGCACATTCAGC
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GCGTCCAATCACAAACGGCTTCCCGTGGTGGAGCATGCCGATGACACCCAGCCTGCCCGGCTCCAGGGCC
TGATCCTGCGCTCCCAGCTCATCGTTCTCTAAAGCACAAAGTGTGTTGGAGCGGTCCAACCTGGGCT
GGTACAGCGGCGCTGAGGCTGAAGGACTTCCGAGACGCTACCCGCGCTTCCCACCCATCCAGTCCATC
CACGTGTCCAGGACGAGCGGGAGTGACCATGGACCTCTCCGAGTTCATGAACCCCTCCCCTACACGG
TGCCCCAGGAGGCGTCTCCACGGGTGTTCAAGCTGTTCCGGGCCCTGGGCTGCGGCACCTGGTGGT
GGTGGACAACCGCAATCAGGTTGTGGGTTGGTGACCAGGAAGGACCTCGCCAGGTACCGCTGGGAAAG
AGAGGCTTGGAGGAGCTCTGCTGGCCAGACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226163 representing NM_001114331
 Red=Cloning site Green=Tags(s)

MANVSKKVSWSGRDRDDEEAAPLLRRTARPGGGTPLLNGAGPGAARQMDPPHPFKEIPHNEKLLSLKY
 ESLDYDENSENQLFLEEERRINHTAFRTVEIKRWVICALIGILTGLVACFIDIVVENLAGLK YRVIKGNID
 KFTEKGGLSFSLLLWATLNAAFVLVGSVIVAFIEPVAAGSGIPQIKCFLNGVKIPHVRLKTLVIK VSGV
 ILSVVGGLAVGKEGPMIHSGSVIAAGISQGRSTSLKRDFKIFEYFRRDTEKRDVFSAGAAAGVSA AFGAP
 VGGVLFSL EEGASFVNQFLTWRIF FASMI STFTLNFVLSIYHGMMWDLSSPGLINFGRFDSEK MAYTIE
 IPVFIAMGVVGGVLGAVFNALNYWLT MFRIRYIHRPCLQVIEAVLVAAVTATVAFVLIYSSRDCQPLQGG
 SMSYPLQLFCADGEYNSMAAAFFNTPEKSVVSLFHDPGSGYNPLTLGLFTLVYFFLACW TYGLTVSAGVF
 IPSLLIGAAWGRLFGISLSYLTGAAIWADPGKYALMGAAAQLGGIVRMTLSLTVIMMEATSNTVYGF PIM
 LVLMTAKIVGDV FIEGLYDMHIQLQSV PFLHWEAPVTSLSLTAREVMSTPVTCLRRREKVGVI VDVLSDT
 ASNHNGFPVVEHADDTQPARLQGLILRSQLIVLLKHKVVERS NLGLVQRRRLKDFRDAYPRFPPIQSI
 HVSQDERECTMDLSEFMNPSPYTVPQEASLPRVFKLFRALGLRHLVVVDNRNQVGLVTRKDLARYRLGK
 RGLEELSLAQT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_001114331

ORF Size: 2343 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_001114331.2](#), [NP_001107803.1](#)

RefSeq Size: 4164 bp

RefSeq ORF: 2346 bp

Locus ID: 1186

UniProt ID: [P51798](#)

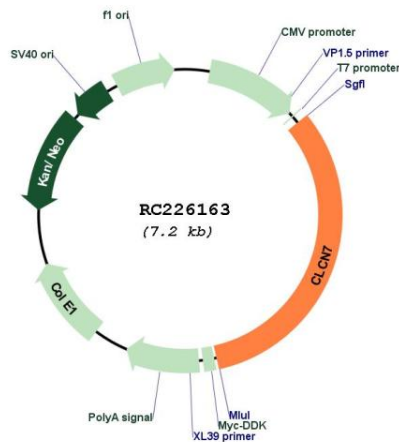
Cytogenetics: 16p13.3

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

MW: 86 kDa

Gene Summary: The product of this gene belongs to the CLC chloride channel family of proteins. Chloride channels play important roles in the plasma membrane and in intracellular organelles. This gene encodes chloride channel 7. Defects in this gene are the cause of osteopetrosis autosomal recessive type 4 (OPTB4), also called infantile malignant osteopetrosis type 2 as well as the cause of autosomal dominant osteopetrosis type 2 (OPTA2), also called autosomal dominant Albers-Schonberg disease or marble disease autosomal dominant. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. OPTA2 is the most common form of osteopetrosis, occurring in adolescence or adulthood. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226163