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 RG226163

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:	TurboGFP
Symbol:	CLC7
Synonyms:	CLC-7; CLC7; HOD; OPTA2; OPTB4; PPP1R63
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG226163 representing NM_001114331
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAACGTCTCTAAGAAGGTGTCCTGGTCCGGCCGGGACCGGGACGACGAGGAGGCGGCGCCGCTGC
TGCGGAGGACGGCGCGGCCCGGCGGGGGGACGCCGCTGCTGAACGGGGCTGGGCCTGGGGCTGCGCGCCA
GGATATGGACCCTCCACATCCCTTCCCCAAGGAGATCCCACACAACGAGAAGCTCCTGTCCCTCAAGTAT
GAGAGCTTGGACTATGACAACAGTGAGAACCAGCTGTTCCTGGAGGAGGAGCGGCGGATCAATCACACGG
CCTTCCGGACGGTGGAGATCAAGCGCTGGGTCATCTGCGCCCTCATTGGGATCCTCACGGGCCTCGTGGC
CTGCTTCATTGACATCGTGGTGGAAAACCTGGCTGGCCTCAAGTACAGGGTCATCAAGGGCAATATCGAC
AAGTTCACAGAGAAGGGCGGACTGTCCTTCTCCCTGTTGCTGTGGGCCACGCTGAACGCCGCCTTCGTGC
TCGTGGGCTCTGTGATTGTGGCTTTCATAGAGCCGGTGGCTGCTGGCAGCGGAATCCCCCAGATCAAGTG
CTTCCTCAACGGGGTGAAGATCCCCCACGTGGTGCGGCTCAAGACGTTGGTGATCAAAGTGTCCGGTGTG
ATCCTGTCCGTGGTCGGGGGCCTGGCCGTGGGAAAGGAAGGGCCGATGATCCACTCAGGTTCAGTGATTG
CCGCCGGGATCTCTCAGGGAAGGTCAACGTCACTGAAACGAGATTTCAAGATCTTCGAGTACTTCCGCAG
AGACACAGAGAAGCGGGACTTCGTCTCCGCAGGGGCTGCGGCCGGAGTGTCAGCGGCGTTTGGAGCCCCC
GTGGGTGGGGTCCTGTTCAGCTTGGAGGAGGGTGCGTCCTTCTGGAACCAGTTCCTGACCTGGAGGATCT
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CCTGTCCAGCCCAGGCCTCATCAACTTCGGAAGGTTTGACTCGGAGAAAATGGCCTACACGATCCACGAG
ATCCCGGTCTTCATCGCCATGGGCGTGGTGGGCGGTGTGCTTGGAGCAGTGTTCAATGCCTTGAACTACT
GGCTGACCATGTTTCGAATCAGGTACATCCACCGGCCCTGCCTGCAGGTGATTGAGGCCGTGCTGGTGGC
CGCCGTCACGGCCACAGTTGCCTTCGTGCTGATCTACTCGTCGCGGGATTGCCAGCCCCTGCAGGGGGGC
TCCATGTCCTACCCGCTGCAGCTCTTTTGTGCAGATGGCGAGTACAACTCCATGGCTGCGGCCTTCTTCA
ACACCCCGGAGAAGAGCGTGGTGAGCCTCTTCCACGACCCGCCAGGCTCCTACAACCCCCTGACCCTCGG
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ATCCCGTCCCTGCTCATCGGGGCTGCCTGGGGCCGGCTCTTTGGGATCTCCCTGTCCTACCTCACGGGGG
CGGCGATCTGGGCGGACCCCGGCAAATACGCCCTGATGGGAGCTGCTGCCCAGCTGGGCGGGATTGTGCG
GATGACACTGAGCCTGACCGTCATCATGATGGAGGCCACCAGCAACGTGACCTACGGCTTCCCCATCATG
CTGGTGCTCATGACCGCCAAGATCGTGGGCGACGTCTTCATTGAGGGCCTGTACGACATGCACATTCAGC
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GCGTCCAATCACAACGGCTTCCCCGTGGTGGAGCATGCCGATGACACCCAGCCTGCCCGGCTCCAGGGCC
TGATCCTGCGCTCCCAGCTCATCGTTCTCCTAAAGCACAAGGTGTTTGTGGAGCGGTCCAACCTGGGCCT
GGTACAGCGGCGCCTGAGGCTGAAGGACTTCCGAGACGCCTACCCGCGCTTCCCACCCATCCAGTCCATC
CACGTGTCCCAGGACGAGCGGGAGTGCACCATGGACCTCTCCGAGTTCATGAACCCCTCCCCCTACACGG
TGCCCCAGGAGGCGTCGCTCCCACGGGTGTTCAAGCTGTTCCGGGCCCTGGGCCTGCGGCACCTGGTGGT
GGTGGACAACCGCAATCAGGTTGTCGGGTTGGTGACCAGGAAGGACCTCGCCAGGTACCGCCTGGGAAAG
AGAGGCTTGGAGGAGCTCTCGCTGGCCCAGACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

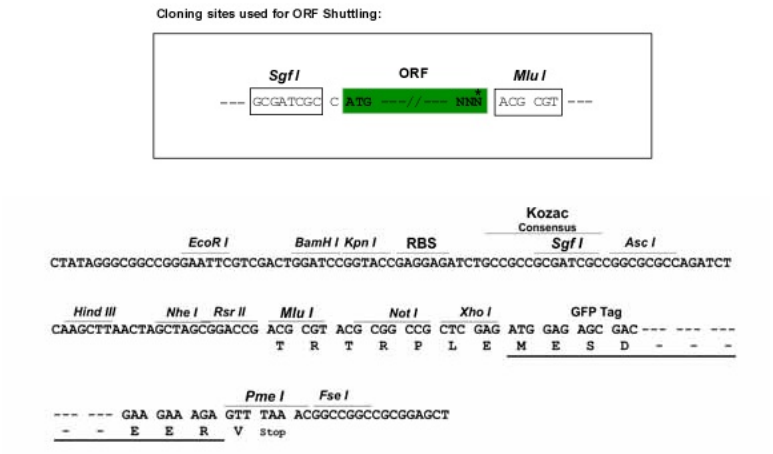
>RG226163 representing NM_001114331
Red=Cloning site Green=Tags(s)

MANVSKKVSWSGRDRDDEEAAPLLRRTARPGGGTPLLNGAGPGAARQDMDPPHPFPKEIPHNEKLLSLKY
ESLDYDNSENQLFLEEERRINHTAFRTVEIKRWVICALIGILTGLVACFIDIVVENLAGLKYRVIKGNID
KFTEKGGLSFSLLLWATLNAAFVLVGSVIVAFIEPVAAGSGIPQIKCFLNGVKIPHVVRLKTLVIKVSGV
ILSVVGGLAVGKEGPMIHSGSVIAAGISQGRSTSLKRDFKIFEYFRRDTEKRDFVSAGAAAGVSAAFGAP
VGGVLFSLEEGASFWNQFLTWRIFFASMISTFTLNFVLSIYHGNMWDLSSPGLINFGRFDSEKMAYTIHE
IPVFIAMGVVGGVLGAVFNALNYWLTMFRIRYIHRPCLQVIEAVLVAAVTATVAFVLIYSSRDCQPLQGG
SMSYPLQLFCADGEYNSMAAAFFNTPEKSVVSLFHDPPGSYNPLTLGLFTLVYFFLACWTYGLTVSAGVF
IPSLLIGAAWGRLFGISLSYLTGAAIWADPGKYALMGAAAQLGGIVRMTLSLTVIMMEATSNVTYGFPIM
LVLMTAKIVGDVFIEGLYDMHIQLQSVPFLHWEAPVTSHSLTAREVMSTPVTCLRRREKVGVIVDVLSDT
ASNHNGFPVVEHADDTQPARLQGLILRSQLIVLLKHKVFVERSNLGLVQRRLRLKDFRDAYPRFPPIQSI
HVSQDERECTMDLSEFMNPSPYTVPQEASLPRVFKLFRALGLRHLVVVDNRNQVVGLVTRKDLARYRLGK
RGLEELSLAQT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001114331

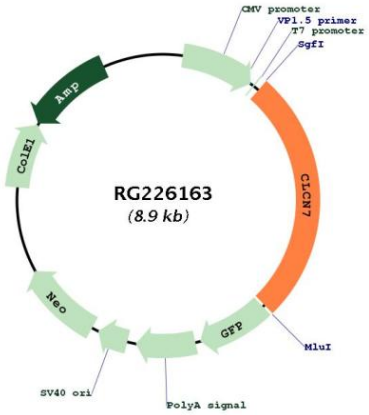
ORF Size: 2343 bp

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
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 autosoml 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 RG226163