

Product datasheet for **RC207731**

CLCA2 (NM_006536) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLCA2 (NM_006536) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CLCA2
Synonyms:	CACC; CaCC-3; CACC3; CLCRG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC207731 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACCCAAAGGAGCATTGCAGGTCTATTGCAACCTGAAGTTGTGACTCTCCTGGTTGCCTTAAGTT
 CAGAACTCCATTCTGGGAGCTGGAGTACAGCTTCAAGACAATGGGTATAATGGATTGCTCATTGCAAT
 TAATCCTCAGGTACCTGAGAATCAGAACCTCATCTCAAACATTAAGGAAATGATAACTGAAGCTTCATT
 TACCTATTTAATGCTACCAAGAGAAGAGTATTTTTCAGAAATATAAAGATTTTAATACCTGCCACATGGA
 AAGCTAATAAACAGCAAAATAAAACAAGAATCATATGAAAAGGCAAATGTCATAGTGACTGACTGGTA
 TGGGGCACATGGAGATGATCCATACACCCTACAATACAGAGGGTGTGGAAAAGAGGGAAAATACATTCAT
 TTCACACCTAATTTCTACTGAATGATAACTTAACAGCTGGCTACGGATCAGGAGCCGAGTGTGTTGCC
 ATGAATGGGCCACCTCCGTTGGGGTGTGTTTCGATGAGTATAACAATGACAAACCTTTCTACATAAATGG
 GCAAAATCAAATTAAGTGACAAGGTGTTTCATCTGACATCACAGGCATTTTTGTGTGTGAAAAGGTCCT
 TGCCCCAAGAAAAGTATTATTAGTAAGCTTTTTAAAGAAGGATGCACCTTTATCTACAATAGCACCC
 AAAATGCAACTGCATCAATAATGTTTCATGCAAAGTTTATCTTCTGTGGTTGAATTTGTAATGCAAGTAC
 CCAACCAAGAAGCACCACCACTACAGAACAGATGTGCAGCCTCAGAAGTGCATGGGATGTAATCACA
 GACTCTGCTGACTTTCCACACAGCTTTCCCATGAATGGGACTGAGCTTCCACCTCCTCCACATTCTCGC
 TTGTACAGGCTGGTGACAAAGTGGTCTGTTTAGTGCTGGATGTGTCCAGCAAGATGGCAGAGGCTGACAG
 ACTCCTTCAACTACAACAAGCCGAGAATTTTATTTGATGCAGATTGTTGAAATTCATACCTTCGTGGGC
 ATTGCCAGTTTCGACAGCAAAGGAGAGATCAGAGCCAGCTACACCAAATTAACAGCAATGATGATCGAA
 AGTTGCTGGTTTCATATCTGCCACCCTGTATCAGCTAAAACAGACATCAGCATTTGTTTCAGGGCTTAA
 GAAAGGATTTGAGGTGGTTGAAAAACTGAATGGAAAAGCTTATGGCTCTGTGATGATATTAGTGACCAGC
 GGAGATGATAAGCTTCTGGCAATTGCTTACCCACTGTGCTCAGCAGTGGTTCAACAATTACTCCATTG
 CCCTGGTTTCTGTCAGCCCCAACTGGAGGAATTATCACGTCTTACAGGAGGTTTAAAGTCTTTGT
 TCCAGATATATCAAACCTCAATAGCATGATTGATGCTTTCAGTAGAATTTCTCTGGAAGTGGAGACATT
 TTCCAGCAACATATTAGCTTGAAGTACAGGTGAAAATGTCAAACCTCACCATCAATTGAAAAACACAG
 TGACTGTGGATAACTGTGGGCAACGACACTATGTTTCTAGTTACGTGGCAGGCCAGTGGTCTCCTGA
 GATTATATTTGATCCTGATGGACGAAAATACTACACAATAATTTTATCACCAATCTAACTTTTCGG
 ACAGCTAGTCTTTGGATTCCAGGAACAGCTAAGCCTGGGCACTGGACTTACACCTGAACAATACCCATC
 ATTCTCTGCAAGCCCTGAAAGTGACAGTGACCTCTCGCGCTCCAACCTCAGCTGTGCCCCAGCCACTGT
 GGAAGCCTTTGTGAAAGAGACAGCCTCCATTTTCTCATCTGTGATGATTTATGCCAATGTGAAACAG
 GGATTTTATCCATTCTTAATGCCACTGTCACTGCCACAGTTGAGCCAGAGACTGGAGATCCTGTTACGC
 TGAGACTCCTTGATGATGGAGCAGGTGCTGATGTTATAAAAAATGATGGAATTTACTCGAGGATTTTTT
 CTCCTTTGCTGCAAAATGGTAGATATAGCTTGAAGTGCATGTCAATCACTCTCCAGCATAAGCACCCCA
 GCCCACTCTATCCAGGGAGTCTGCTATGTATGTACCAGTTACACAGCAAACGGTAATATTAGATGA
 ATGCTCCAAGGAAATCAGTAGGCAGAAATGAGGAGGAGCGAAAGTGGGGCTTTAGCCGAGTCAGCTCAGG
 AGGCTCCTTTTTCAGTGTGGGAGTTCAGCTGGCCCCACCCTGATGTGTTTCCACCATGCAAAATTTATT
 GACCTGGAAGCTGTAAAAGTAGAAGAGGAATTGACCCTATCTTGACAGCACCTGGAGAAGACTTTGATC
 AGGGCCAGGCTACAAGCTATGAAATAAGAATGAGTAAAAGTCTACAGAATATCCAAGATGACTTTAACAA
 TGCTATTTTAGTAAATACATCAAAGCGAAATCCTCAGCAAGCTGGCATCAGGGAGATATTTACGTTCTCA
 CCCCAAATTTCCACGAATGGACCTGAACATCAGCCAAATGGAGAAAACACATGAAAGCCACAGAATTTATG
 TTGCAATACGAGCAATGGATAGGAACCTTACAGTCTGCTGTATCTAACATTGCCAGGCGCCTCTGTT
 TATTTCCCCCAATTCTGATCCTGTACCTGCCAGAGATTCTTATATTGAAAGGAGTTTTAACAGCAATG
 GGTTTGATAGGAATCATTTGCCATTATTAGTTGTGACACATCACTTTAAGCAGGAAAAAGAGAGCAG
 ACAAGAAAGAGAATGGAACAAAATTATTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207731 protein sequence
Red=Cloning site Green=Tags(s)

```

MTQRSIAGPICNLKFVTLVALSSELPFLGAGVQLQDNGYNGLLIAINPQVPENQNLISNIKEMITEASF
YLFNATKRRVFFRNIKILIPATWKANNNSKIKQESYEKANVIVTDWYGAHGDDPYTLQYRGGCKEGKYIH
FTPNFLNDNL TAGYGSRGRVVFVHEWAHLRWGVFDEYNNDKPFYINGQNQIKVTRCSSDITGIFVCEKGP
CPQENCIISKLFKEGCTFIYNSTQ NATASIMFMQSLSSVVEFCNASTHNQEAPNLQNMCSLRSAWDVIT
DSADFHHSFPMNGTELP PPTFSLVQAGDKVVCLVLDVSSKMAEADRLQLQQA AEFYLMQIVEIHTFVG
IASFDSKGEIRAQLHQINSNDRKLLVSYLPTTVSAKTDISICSGLKKGFVVEKLNKAYGSMILVTS
GDDKLLGNCLPTVLSGSTIHSIALGSSAAPNLEEL SRLTGGLKFFVPDISNSNSMIDAFSRISSTGDI
FQHQIQLESTGENVKPHHLKNTVTVDNTVGNMTMFLVTWQASGPPEIILFDPDGRKYTNNFITNL TFR
TASLWIPGTAKPGHWYTLNNTHHSLQALKVTVTSRASNSAVPPATVEAFVERDSLHFPHPVMIYANVKQ
GFYPILNATVTATVEPETGDPVTLRLDDGAGADV IKNNGIYSRYFFSFAANGRYSLKVHVNHSPSISTP
AHSIPGSHAMYVPGYTANGNIQMNAPRKS VGRNEEERK WGF SRVSSGGSF SVLGV P AGPHDPVFPCKII
DLEAVKVEEEL TSWTAPGEDFDQGQATSYEIRMSKSLQNIQDDFNNA I LVNTSKRNPQQAGIREIFTFS
PQISTNGPEHQNGETHESHRIYVAIRAMDRNSLQSAVSNIAQAPLFI PPNSDPVPARDYLILKGVLTAM
GLIGIICLIIVVTHHTLSRKKRADKKENGTKLL
    
```

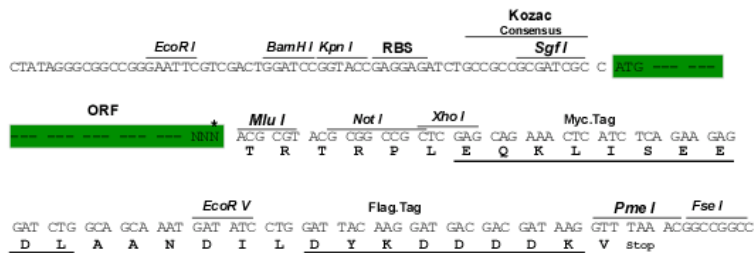
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6088_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



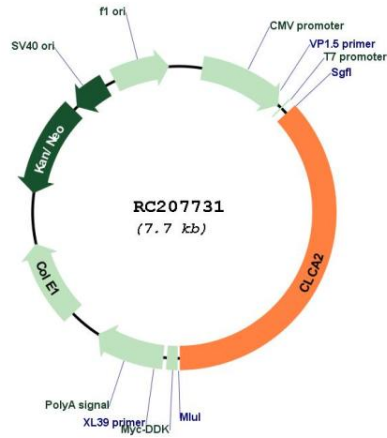
* The last codon before the Stop codon of the ORF

ACCN: NM_006536

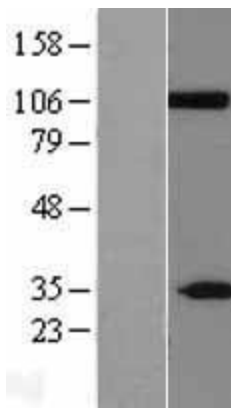
ORF Size: 2829 bp

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:	<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:	NM_006536.7
RefSeq Size:	4043 bp
RefSeq ORF:	2832 bp
Locus ID:	9635
UniProt ID:	Q9UQC9
Cytogenetics:	1p22.3
Domains:	VWA
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
Protein Pathways:	Olfactory transduction
MW:	103.9 kDa
Gene Summary:	This gene encodes a member of the calcium-activated chloride channel regulator (CLCR) family of proteins. Members of this family regulate the transport of chloride across the plasma membrane. The encoded protein is autoproteolytically processed to generate N- and C- terminal fragments. Expression of this gene is upregulated by the tumor suppressor protein p53 in response to DNA damage. In breast cancer, expression of this gene is downregulated and the encoded protein may inhibit migration and invasion while promoting mesenchymal-to-epithelial transition in cancer cell lines. [provided by RefSeq, Sep 2016]

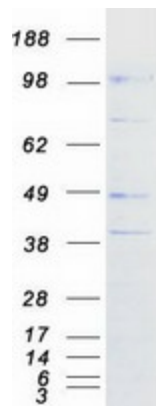
Product images:



Circular map for RC207731



Western blot validation of overexpression lysate (Cat# [LY416578]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207731 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CLCA2 protein (Cat# [TP307731]). The protein was produced from HEK293T cells transfected with CLCA2 cDNA clone (Cat# RC207731) using MegaTran 2.0 (Cat# [TT210002]).