

Product datasheet for **RC222603**

LRRC8C (NM_032270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LRRC8C (NM_032270) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LRRC8C
Synonyms:	AD158; FAD158
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222603 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATTCCCGTGACAGAATTCGGCAGTTCTCTGAGCAGCAGCCTGCCTCCGAGTGCTGAAGCCATGGT
 GGGATGTGTTTACCGATTACCTCTCAGTAGCCATGCTCATGATCGGCGTGTGGATGACTTTACAGGT
 CATGCAAGACAAGATAATCTGCCTTCCGAAAAGAGTGCAGCCTGCTCAGAACCCTCTTCCCTTTGAAAT
 GTCTCTCAAGCAGTTGCCAGTACCCTCCACTGCCTCCACCTAAACCATCTCTGCTAACCCCATCACTG
 TGGAAATGAAAGGCTGAAGACAGATTTGGACCTCAGCAGTACAGCTTTATAAATCAGATGTGTTATGA
 GCGAGCCCTCCACTGGTATGCCAAGTATTTCCCTTACCTTGTCTCATCCATACCCTGGTCTTTATGCTC
 TGCAGTAACTTTGGTTCAAATTCCTGGTCCAGCTCCAAAATAGAACATTTTCATCTCCATTCTGGGGA
 AGTGTGTTGACTCTCCTTGGACCACACGGGCTTTATCTGAAGTGTCTGGGAGGACTCAGAAGAAAAGGA
 CAACAGGAAGAACAACATGAACAGGTCCAACACCATCCAATCTGGTCCAGAAGGCAGCCTGGTCAACTCT
 CAGTCTTTAAAGTCCATTCTGAGAAGTTGTAGTTGATAAATCCACTGCAGGGGCTCTGGATAAAAAGG
 AAGGTGAGCAGGCTAAGGCCTTATTTGAGAAGGTGAAGAAGTTCAGGCTGCATGTGGAAGAGGTGATAT
 TCTATATGCCATGTATGTTCCGACAGCTGACTTAAAGTTATCAAATTCCTAATCATATTGCATATAAT
 AGTGCTCTGGTTTCCAAGTCCAGTTTACAGTGGACTGTAATGTGGACATTCAGGACATGACTGGATATA
 AAACTTTTCTTGAATCATACCATGGCACACTGTTCTCAAACCTGCTTTTGTCTATCTGTGCTTTGT
 TAGTATCTATGGATTGACGTGCCTTTATACCTTAACTGGCTGTCTACCGTTCTCTACGGGAATATTCC
 TTTGAGTATGTCGGTCCAGGACTGGAATGATGATATCCAGATGTGAAAAATGACTTTGCTTTTATGC
 TTCATATGATAGATCAGTATGACCTCTCTATCCCAAGAGATTTGCAGTGTCTGTCTGAAGTCAAGTGA
 AAACAAAATTAAGCAGCTGAACCTTAAATAACGAATGGACTCCTGATAAACTGAGGCAGAAGCTACAGACA
 AATGCCATAATCGACTGGAATTCCTCTTATCATGCTCTCTGGCCTTCCAGACTGTTTTGAAATCA
 CAGAGTTGCAATCTCTAAAACCTGAAATCATTAAAGACGTAATGATACCAGCCACCATTCACAGCTAGA
 CAATCTTCAAGAGCTCTCTGACCCAGTGTCTGTCAAATCCACAGTGCAGGCTCTCTTTCTGAAAG
 GAAAACCTCAAGGCTTGGAGCGTCAAGTTTGTGACATGAGGGAACCTCCCCCTGGATGTATGGCTCC
 GAAATCTGGAAGAGCTGTACCTAGTTGGCTCTCTAAGTCATGATATTTCCAGAAATGTCACCCTTGAGTC
 TCTGCGGATCTCAAAGCCTTAAAATCTCTCTATCAAAGCAACGTTTCCAAAATCCCTCAGGCAGTG
 GTTGTATGTTTCCAGCCATCTCCAGAAGATGTGCATACATAATGATGGCACCAAGCTGGTGTGCTCAACA
 ACTTAAAGAAGATGACCAATCTGACAGAGCTGGAGCTGGTCCACTGTGACCTGGAGCGTATTCTCATGC
 TGTGTTACGCCTACTCAGCCTCCAGGAATTGGACTGAAGGAAAAACAATCTGAAATCTATAGAAGAAATC
 GTTAGCTTTCAGCACTTAAAGAAAGTTGACAGTGTAAAACCTGTGGCATAACAGCATCACCTACATCCCAG
 AGCATATAAGAAAACCTACCAGCCTGGAACGCCTGTCTTTAGTCACAATAAAATAGAGGTGCTGCCTTC
 CCACCTCTTCTATGCAACAAGATCCGATACTTGGACTTATCGTACAATGACATTCGATTTATCCCCCT
 GAAATGGAGTTCTACAAAGTTTACAGTATTTTCCATCACATGTAACAAAGTGGAAAGCCTTCCAGATG
 AACTCTACTTCTGCAAGAACTTAAAACCTGAAGATTGGAAAAACAGCCTATCTGTACTTTACCCGAA
 AATTGGAATTTGCTATTTCTTTCTACTTAGATGTAAGGTAATCACTTTGAAATCCTCCCTCCTGAA
 CTGGGTGACTGTGGGCTCTGAAGCGAGCTGTTTGTAGTTGTAAGATGCTCTGTTTGAACCTCTGCCTT
 CTGACGTCGGGAGCAAATGAAAACAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222603 protein sequence
 Red=Cloning site Green=Tags(s)

MIPVTEFRQFSEQQPAFRVLKPWWVFTDYL SVAMLMIGVFGCTLQVMQDKIICLPKRVQPAQNHSSL SN
 VSQAVASTTPLPPKPSANPITVEMKGLKTDLDLQQYSFINQMCYERALHWYAKYFPYL VLIHTLVFML
 CSNFWFKFPGSSSKIEHFISILGKCFDSPWTRALSEVSGEDSEEKDNRKNMNRSNTIQSGPEGSLVNS
 QSLKSIPEKFVVDKSTAGALDKKEGEQAKALFEKVKFRLHVEEGDILYAMYVRQTVLKVIFLIIAYN
 SALVSKVQFTVDCNVDIQDMTGYNFSCNHTMAHLFSKLSFCYLCFVSIYGLTCLYTLYWLFYRSLREYS
 FEYVRQETGIDDIPDVKNDFAFMLHMIDQYDPLYSKRFAVFLSEVSENKQKQLNLNNEWTPDKLRQKLQT
 NAHNRLELPLIMLSGLPDTVFEITELQSLKLEIKNVMIPATIAQLDNLQELSLHQCSVKIHSAAALSFLK
 ENLKVLSVKFDDMRELPPWMYGLRNLEELYLVGSLSHDISRNVTLSELRDLKSLKILSIKSNVSKIPQAV
 VDVSSHLQKMCIHNDGTLVMLNLLKMTNLTELELVHCDLERIPHAVFSLLSLQELDLKENNLKSIEEI
 VSFQHLRKLTVLKLWHNSITYIPEHIKLTSLERLSFSHNKIEVLP SHLFLCNKIRYLDLSYNDIRFIPP
 EIGVLQSLQYFSITCNKVESLPDELYFCKKLTCLKIGKNSLSVLSPKIGNLLFLSYLDVKGNHFEILPPE
 LGDCRALKRAGLVVEDALFETLPSDVREQMKTE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

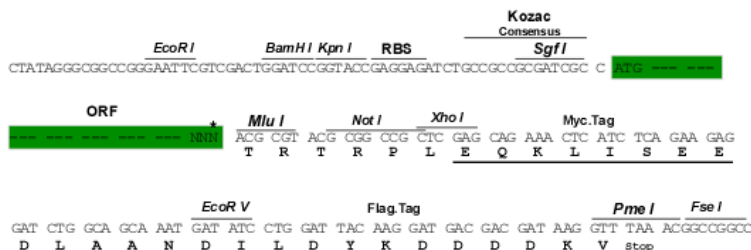
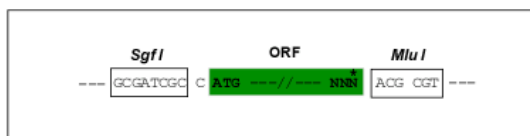
https://cdn.origene.com/chromatograms/mk6609_c10.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

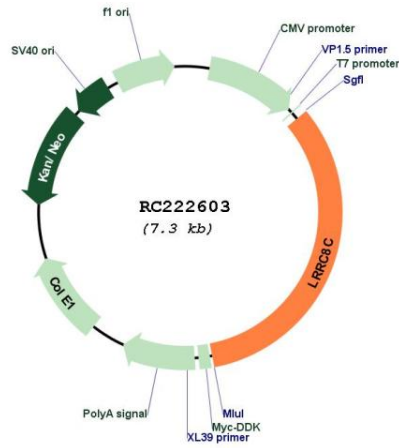


* The last codon before the Stop codon of the ORF

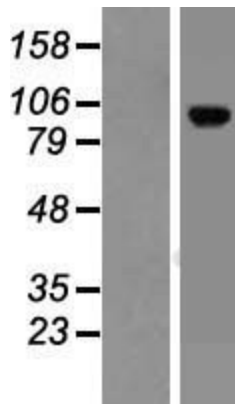
- ACCN:** NM_032270
- ORF Size:** 2409 bp
- OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_032270.4
RefSeq Size:	7207 bp
RefSeq ORF:	2412 bp
Locus ID:	84230
UniProt ID:	Q8TDW0
Cytogenetics:	1p22.2
Domains:	LRR, LRR_TYP, LRR_PS
Protein Families:	Transmembrane
MW:	92.4 kDa
Gene Summary:	Non-essential component of the volume-regulated anion channel (VRAC, also named VSOAC channel), an anion channel required to maintain a constant cell volume in response to extracellular or intracellular osmotic changes. The VRAC channel conducts iodide better than chloride and can also conduct organic osmolytes like taurine. Plays a redundant role in the efflux of amino acids, such as aspartate and glutamate, in response to osmotic stress. Channel activity requires LRRC8A plus at least one other family member (LRRC8B, LRRC8C, LRRC8D or LRRC8E); channel characteristics depend on the precise subunit composition. [UniProtKB/Swiss-Prot Function]

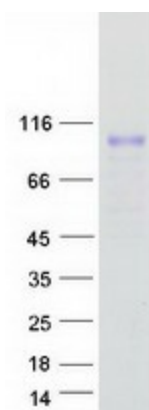
Product images:



Circular map for RC222603



Western blot validation of overexpression lysate (Cat# [LY410256]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222603 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LRRC8C protein (Cat# [TP322603]). The protein was produced from HEK293T cells transfected with LRRC8C cDNA clone (Cat# RC222603) using MegaTran 2.0 (Cat# [TT210002]).