

Product datasheet for **RC227665**

C2 (NM_001145903) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C2 (NM_001145903) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C2
Synonyms:	ARMD14; CO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227665 representing NM_001145903
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCACTGATGTTCTTTTTGCCTGCTGTTCTGTACCCAGCTGGCCACTGCCCCAACCCAGGCA
 TTTCACCTGGGCGCAGTGCAGGACAGGCTTCGCTTTGGTCATGGGACAAGGTCCGCTATCGCTGCTCCTC
 GAATCTTGTGCTCACGGGTCTTCGAGCGGGAGTGCCAGGGCAACGGGTCTGGAGTGGAAACGGAGCCC
 ATCTGCCCAACCTACTCTTATGACTTCCCTGAGGACGTGGCCCTGCCCTGGGCACTTCCTTCTCCC
 ACATGCTTGGGGCCACCAATCCCACCCAGAAGACAAAGGAAAGCCTGGGCCGTAATAATCCAAATCCAGCG
 CTCTGGTCATCTGAACCTCTACCTGCTCCTGGACTGTTTCGAGAGTGTGTCGAAAATGACTTTCTCATC
 TTCAAGGAGAGCGCTCCCTCATGGTGGACAGGATCTTCAGCTTTGAGATCAATGTGAGCGTTGCCATTA
 TCACCTTTGCCTCAGAGCCAAAGTCTCATGTCTGCTGCTGAACGACAACCTCCGGGATATGACTGAGGT
 GATCAGCAGCCTGAAAATGCCAACTATAAAGATCATGAAAATGGAAGTGGGACTAACACCTATGCGGCC
 TTAACAGTGTCTATCTCATGATGAACAACCAATGCGACTCCTCGGCATGGAAACGATGGCCTGGCAGG
 AAATCCGACATGCCATCATCCTTCTGACAGATGAAAAGTCCAATATGGGTGGCTCTCCAAGACAGCTGT
 TGACCATATCAGAGAGATCCTGAACATCAACCAGAAGAGGAATGACTATCTGGACATCTATGCCATCGGG
 GTGGGCAAGCTGGATGTGGACTGGAGAGAACTGAATGAGCTAGGGTCCAAGAAGGATGGTGGAGGCATG
 CCTTATTCTGCAGGACAAAAGGCTCTGCACCAGGTCTTTGAACATATGCTGGATGTCTCCAAGCTCAC
 AGACACCATCTGCGGGTGGGAAACATGTCAGCAAACGCTCTGACCAGGAGAGGACACCCTGGCATGTC
 ACTATTAAGCCAAAGAGCAAGAGACCTGCCGGGGGCCCTCATCTCCGACCAATGGGTCTGACAGCAG
 CTCATTGCTTCCGCGATGGCAACGACCACTCCCTGTGGAGGGTCAATGTGGGAGACCCCAATCCCAGTG
 GGGCAAAGAATTCTTATTGAGAAGGCGGTGATCTCCCAAGGTTTGATGTCTTTGCCAAAAAGAACCAG
 GGAATCTGGAGTTCTATGGTGTGACATAGCTCTGCTGAAGCTGGCCAGAAAAGTAAAGATGTCCACCC
 ATGCCAGGCCATCTGCCTTCCCTGCACGATGGAGGCAATCTGGCTCTGCGGAGACCTCAAGGCAGCAC
 CTGTAGGGACCATGAGAATGAAGTGTGAACAAACAGAGTGTTCCTGCTCATTGTGCTGCTTGAATGGG
 AGCAAAGTGAACATTAACCTTAAGATGGGAGTGGAGTGGACAAGCTGTGCCGAGGTTGTCTCCAAGAAA
 AAACCATGTTCCCAACTGACAGATGTCAGGGAGGTGGTACAGACCAGTTCCTATGCAGTGGGACCCA
 GGAGGATGAGAGTCCCTGCAAGGAGAATCTGGGGGAGCAGTTTTCTTGAGCGGAGATTAGGTTTTTT
 CAGGTGGGTCTGGTGGAGTGGGCTTTTACAACCCTGCCTTGGCTCTGCTGACAAAACTCCCGAAAA
 GGGCCCTCGTAGCAAGTCCCGCCGCCACGAGACTTTCACATCAATCTCTCCGATGCAGCCCTGGCT
 GAGGCAGCACCTGGGGATGTCTGAATTTTTTACCCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227665 representing NM_001145903
 Red=Cloning site Green=Tags(s)

MGPLMVLFCLLFLYPAGHCPNPGISLGAVRTGFRFGHGDKVRYRCSSNLVLTGSSERECQNGVWSGTEP
 ICRQPYSYDFPEDVAPALGTSFSLHMLGATNPTQKTKESLGRKIQIQRSGHLNLYLLLDSCSQSVSENFLLI
 FKESASLMVDRIFSFEINVSVAIITFASEPKVLMVSLNDNSRDMTEVISSLENANANYKDHENGTGNTYAA
 LNSVYLMNMQMRLGEMTMAWQEIIRHAIILLTDGKSNMGGSPKTAVDHIREILNINQKRNDYLDIYAIG
 VGKLDVDWRELNELGSKKDGERHAFILQDTKALHQVFEHMLDVSKLTDITCGVGNMSANASDQERTPWVH
 TIKPKSQETCRGALISDQWVLTAAHCFRDGNDHSLWRVNVGDPKSQWGKEFLIEKAVISPGFDVFAKKNQ
 GILEFYGDDIALKLAKVKMSTHARPICLPCTMEANLALRRPQGSTCRDHENELLNKQSVPAHFVALNG
 SKLNINLKMGEVWTSCAEVVSQEKTMFPNLTDVREVVTDQFLCSGTQEDESPPCKGESGGAVFLERRFRFF
 QVGLVSWGLYNPCLGSADKNSRKRAPRSKVPVPPRDFHINLFRMQPWLRLQHLGDVNLFLPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8070_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145903

ORF Size: 1860 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.

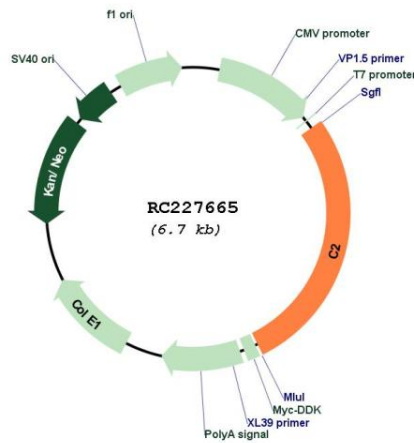
RefSeq: [NM_001145903.3](#)

RefSeq ORF: 1863 bp

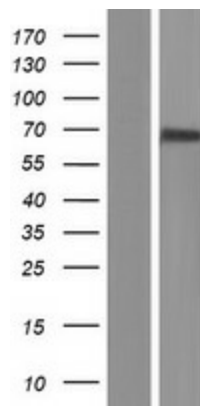
Locus ID: 717

UniProt ID: [P06681](#)
Cytogenetics: 6p21.33
Protein Families: Druggable Genome, Protease, Secreted Protein
Protein Pathways: Complement and coagulation cascades, Systemic lupus erythematosus
MW: 69.44 kDa
Gene Summary: Component C2 is a serum glycoprotein that functions as part of the classical pathway of the complement system. Activated C1 cleaves C2 into C2a and C2b. The serine proteinase C2a then combines with complement factor 4b to create the C3 or C5 convertase. Deficiency of C2 has been reported to associated with certain autoimmune diseases and SNPs in this gene have been associated with altered susceptibility to age-related macular degeneration. This gene localizes within the class III region of the MHC on the short arm of chromosome 6. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described in publications but their full-length sequence has not been determined.[provided by RefSeq, Mar 2009]

Product images:



Circular map for RC227665



Western blot validation of overexpression lysate (Cat# [LY429041]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227665 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).