

## Product datasheet for **RC230248**

### **C2 (NM\_001178063) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	C2 (NM_001178063) 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:**

>RC230248 representing NM\_001178063  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCGTGCCTGTGCATCAGGGAGACCTGCAGCTCCGAGCTGGGGTTCAGCAGGAACTGGTCCCGCAGGA  
 AGGCTGGCCACTGCCCAACCCAGGCATTTCACTGGGCGCAGTGCAGGACAGGCTTCCGCTTTGGTCAATGG  
 GGACAAGGTCCGCTATCGCTGCTCCTCGAATCTTGTGCTCACGGGGTCTTCGGAGCGGGAGTGCCAGGGC  
 AACGGGGTCTGGAGTGAACGGAGCCACTGCGCCCAACCCACTCTTATGACTTCCCTGAGGACGTGG  
 CCCCTGCCCTGGGCACTTCTTTCTCCACATGCTTGGGGCCACCAATCCCACCCAGAAGACAAAGGATCA  
 TGAATAATGGAAGTGGGACTAACACCTATGCGGCCCTTAAACAGTGTCTATCTCATGATGAACAACCAATG  
 CGACTCCTCGGCATGGAAACGATGGCCTGGCAGGAAATCCGACATGCCATCATCCTTCTGACAGATGGAA  
 AGTCCAATATGGGTGGCTCTCCAAGACAGCTGTTGACCATATCAGAGAGATCCTGAACATCAACCAGAA  
 GAGGAATGACTATCTGGACATCTATGCCATCGGGTGGGCAAGCTGGATGTGGACTGGAGAGAAGTGAAT  
 GAGCTAGGGTCCAAGAAGGATGGTGAGAGGCATGCCTTATTCTGACAGGACACAAAGGCTCTGCACCAGG  
 TCTTTGAACATATGCTGGATGTCTCAAGCTCACAGACACCATCTGCGGGGTGGGGAACATGTCAGCAAA  
 CGCCTCTGACCAGGAGAGGACACCCTGGCATGTCACTATTAAGCCCAAGAGCCAAGAGACCTGCCGGGGG  
 GCCCTCATCTCCGACCAATGGGTCTGACAGCAGCTCATTGCTTCCGCGATGGCAACGACCACTCCCTGT  
 GGAGGGTCAATGTGGGAGACCCAAATCCCAGTGGGGCAAAGAATTCCTTATTGAGAAGGCGGTGATCTC  
 CCCAGGGTTTGATGTCTTTGCCAAAAAGAACAGGGAATCCTGGAGTTCTATGGTGATGACATAGCTCTG  
 CTGAAGCTGGCCAGAAAGTAAAGATGTCCACCCATGCCAGGCCATCTGCCTTCCCTGCACGATGGAGG  
 CCAATCTGGCTCTGCGGAGACCTCAAGGCAGACCTGTAGGGACCATGAGAATGAATGCTGAACAAACA  
 GAGTGTTCTCTGCTCATTGTCGCCTTGAATGGGAGCAAACCTGAACATTAACTTAAAGATGGGAGTGGAG  
 TGGACAAGCTGTGCCGAGGTTGTCTCCCAAGAAAAACCATGTTCCCAACTTGACAGATGTCAGGGAGG  
 TGGTGACAGACCAGTTTCTATGACAGTGGGACCCAGGAGGATGAGAGTCCCTGCAAGGGAGAATCTGGGGG  
 AGCAGTTTTCTTGGAGCGGAGATTCAGGTTTTTTTTCAGGTGGGTCTGGTGAGCTGGGGTCTTTACAACCC  
 TGCCTTGGCTCTGCTGACAAAACTCCCGCAAAGGGCCCTCGTAGCAAGGTCCCGCCGCCACGAGACT  
 TTCACATCAATCTCTCCGATGCAGCCCTGGCTGAGGCAGCACCTGGGGATGTCCTGAATTTTTTACC  
 CCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC230248 representing NM\_001178063  
 Red=Cloning site Green=Tags(s)

MRALCIRETCSELGFSRNWSRRKAGHCPNPGISLGAVRTGFRFHGDKVRYRCSNLVLTGSSERECQG  
 NGVWSGTEPICRQPYSYDFPEDVAPALGTSF SHMLGATNPTQKTKDHENGTGNTYAALNSVYLMNNQM  
 RLLGMETMAWQEIRHAIILLTDGKSNMGGSPKTAVDHIREILNINQKRNDYLDIYAIGVGKLDVDWRELN  
 ELGSKDGERHAFILQDTKALHQVFEHMLDVSKLTDITCGVGNMSANASDQERTPWHVTIKPKSQETCRG  
 ALISDQWVLTAAHCFRDGNDHSLWRVNVGDPKSQWGKEFLIEKAVISPGFDVFAKKNQGIIEFYGDDIAL  
 LKLAQKVKMSTHARPICLPCTMEANLALRRPQGSTCRDHENELLNKQSVPAHFVALNGSKLNINLKMGEV  
 WTSCAEVVSQEKTMFPNLTDVREVVTQDFLCSGTQEDESPCKGESGGAVFLERRFRFFQVGLVSWGLYNP  
 CLGSADKNSRKRAPRSKVPPPRDFHINLFRMQPWLQHLGDVLFNLFPL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8066\\_b07.zip](https://cdn.origene.com/chromatograms/mk8066_b07.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001178063

**ORF Size:** 1614 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\\_001178063.2](#), [NP\\_001171534.1](#)

**RefSeq ORF:** 1617 bp

**Locus ID:** 717

**UniProt ID:** [P06681](#)

**Cytogenetics:** 6p21.33

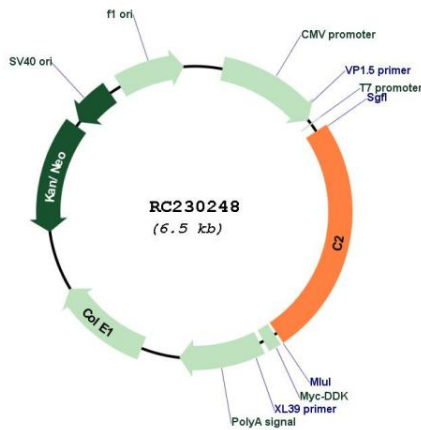
**Protein Families:** Druggable Genome, Protease, Secreted Protein

**Protein Pathways:** Complement and coagulation cascades, Systemic lupus erythematosus

**MW:** 60.8 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 RC230248