

Product datasheet for **RC208097**

C2 (NM_000063) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C2 (NM_000063) 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)



[View online »](#)

ORF Nucleotide
Sequence:

>RC208097 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGCCACTGATGGTTCTTTTTGCCTGCTGTTCTGTACCCAGGTCTGGCAGACTCGGCTCCCTCCT
GCCCTCAGAACGTGAATATCTCGGGTGGCACCTTCACCCTCAGCCATGGCTGGGCTCCTGGGAGCCTTCT
CACCTACTCTGCCCCAGGGCCTGTACCCATCCCAGCATCACGGCTGTGCAAGAGCAGCGGACAGTGG
CAGACCCAGGAGCCACCCGGTCTCTGTCTAAGGCGGTCTGCAAACCTGTGCGCTGTCCAGCCCCTGTCT
CCTTTGAGAATGGCATTATACCCACGGCTGGGGTCTATCCCGTGGGTGGCAATGTGAGCTTCGAGTG
TGAGGATGGTTCATATTGCGGGGCTCGCTGTGCGTCAGTGTGCCCCAACGGCATGTGGGATGGAGAA
ACAGCTGTGTGATAATGGGGTGGCCACTGCCCAACCCAGGCATTTCACTGGGCGCAGTGGGACAG
GCTTCCGCTTTGGTCATGGGACAAGTCCGCTATCGTGTCTCCTCGAATCTTGTGCTCACGGGGTCTTC
GGAGCGGAGTGCCAGGGCAACGGGGTCTGGAGTGGAAACGGAGCCCATCTGCCGCCAACCTACTCTTAT
GACTTCCCTGAGGACGTGGCCCCTGCCCTGGGCACTTCTTCTCCACATGCTTGGGGCCACCAATCCCA
CCCAGAAGACAAAGGAAAGCCTGGGCCGTAAAAATCCAAATCCAGCGCTCTGGTACTCTGAACCTCTACCT
GCTCCTGGACTGTTTCGACAGTGTGTGCGAAAAATGACTTCTCATCTTCAAGGAGAGCGCCTCCCTCATG
GTGGACAGGATCTTCAGCTTTGAGATCAATGTGAGCGTTGCCATTATCACCTTTGCCTCAGAGCCCAAG
TCCTCATGTCTGTCTGAACGACAACCTCCCGGATATGACTGAGGTGATCAGCAGCCTGGAAAATGCCAA
CTATAAGATCATGAAAATGGAAGTGGGACTAACACCTATGCGGCCTTAAACAGTGTCTATCTCATGATG
AACACCAAAATGCGACTCTCGGCATGGAACGATGGCCTGGCAGGAAATCCGACATGCCATCATCTTTC
TGACAGATGGAAAGTCCAATATGGGTGGCTCTCCAAGACAGCTGTTGACCATATCAGAGAGATCCTGAA
CATCAACCAGAAGAGGAATGACTATCTGGACATCTATGCCATCGGGTGGGCAAGCTGGATGTGGACTGG
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ACCTGCCGGGGGCCCTCATCTCCGACCAATGGGTCTGACAGCAGCTCATTGCTTCCGCGATGGCAACG
ACCACTCCCTGTGGAGGGTCAATGTGGGAGACCCCAAATCCAGTGGGGCAAAGAATTCTTATTGAGAA
GGCGGTGATCTCCCAGGGTTTGTATGTCTTTGCCAAAAAGAACCCAGGGAATCCTGGAGTTCTATGGTGAT
GACATAGCTCTGTGAAGCTGGCCAGAAAGTAAAGATGTCCACCCATGCCAGGCCCATCTGCCTCCCT
GCACGATGGAGGCCAATCTGGCTCTGCGGAGACCTCAAGGCAGCACCTGTAGGGACCATGAGAATGAACT
GCTGAACAAACAGAGTGTCTCTGCTCATTTTGTGCGCTTGAATGGGAGCAAACCTGAACATTAACCTTAAG
ATGGGAGTGGAGTGGACAAGCTGTGCCAGGTTGTCTCCAAGAAAAAACCATGTTCCCAACTTGACAG
ATGTCAGGGAGGTGGTGACAGACCAGTTCCTATGCAGTGGGACCCAGGAGGATGAGAGTCCCTGCAAGGG
AGAATCTGGGGGAGCAGTTTTCTTGAGCGGAGATTAGGTTTTTTAGGTGGTCTGGTGAGCTGGGGT
CTTTACAACCCCTGCCTTGGCTCTGTGACAAAACTCCCGCAAAGGGCCCTCGTAGCAAGGTCCCGC
CGCCACGAGACTTTCACATCAATCTCTCCGCATGCAGCCCTGGCTGAGGCAGCACCTGGGGATGTCT
GAATTTTTTACCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208097 protein sequence
Red=Cloning site Green=Tags(s)

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MGPLMVLFCLLFLYPGLADSAPSCPQNVNISGGTFTLSHGWPAGSLLTYSQPQLYPSASRLCKSSGQW
QTPGATRSLSKAVCKPVRCPAPVSFENGIYTPRLGSSYPVGGNVSFECEDGFI LRGSPVRQCRPNGMWDGE
TAVCDNGAGHCPNPGISLGAVRTGFRFGHGDKVRYRCSNLVLTGSSERECQNGVWSGTEPICRQPYSY
DFPEDVAPALGTSF SHMLGATNPTQKTKE SLGRKIQIQRSGHLNLYLLLD CSQSVS ENDFLIFKESASLM
VDRI FSFEINVSVAIITFASEPKVLSVLNDSRDMTEV ISSLENANYKDHENGTNTYAALNSVYLMM
NNQMRL LGMETMAWQEIRHAIILLTDGKSNMGGSPKTAVDHIREILNINQKRNDYLDIYAIGVGLDVDW
RELNELGSKKDGERHAFILQDTKALHQVFEHMLDVSKLTD TICGVGNMSANASDQERTPWHVTIKPKSQE
TCRGALISDQWVLTAAHCFRDGNDHSLWRVNVGDPKSQWGKEFLIEKAVISPGFDVFAKNQGGILEFYGD
DIAL LKLAQKVKMSTHARPICLPCTMEANLALRRPQGSTCRDHENELLNKQSVPAHFVALNGSKLNINLK
MGVEWTS CAEVVSQEKTFMFPNLTDVREVVDQFLCSGTQEDESPCKGESGGAVFLERRFRFFQVGLVSWG
LYNPCLGSADKNSRKRAPRSKVP PPRDFHINLFRMQPWL RQHLGDV LNF LPL
    
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6155_h09.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_000063

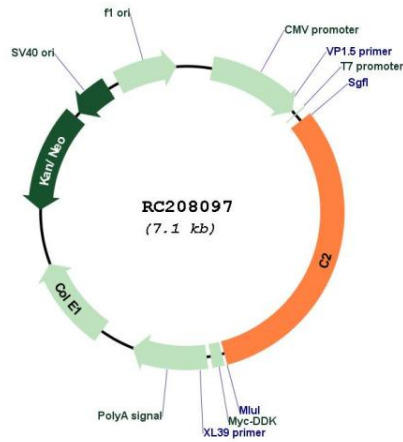
ORF Size: 2256 bp

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](#)

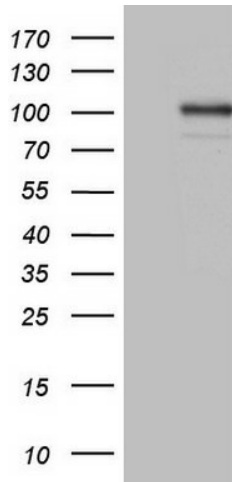
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000063.6
RefSeq Size:	2862 bp
RefSeq ORF:	2259 bp
Locus ID:	717
UniProt ID:	P06681
Cytogenetics:	6p21.33
Domains:	CCP, Tryp_SPc, VWA
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Complement and coagulation cascades, Systemic lupus erythematosus
MW:	83.3 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]

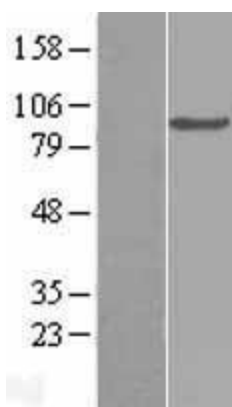
Product images:



Circular map for RC208097



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY C2 (Cat# RC208097, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-C2 (Cat# [TA807188])(1:2000). Positive lysates [LY400024] (100ug) and [LC400024] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400024]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208097 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).