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Product datasheet for RC209562

Complement C7 (C7) (NM_000587) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Complement C7 (C7) (NM_000587) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Complement C7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC209562 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGTGATAAGCTTATTCATTTTGGTGGGATTTATAGGAGAGTTCCAAAGTTTTTCAAGTGCCTCCT
CTCCAGTCAACTGCCAGTGGGACTTCTATGCCCCTTGGTCAGAATGCAATGGCTGTACCAAGACTCAGAC
TCGCAGGCGGTCAGTTGCTGTGTATGGGCAGTATGGAGGCCAGCCTTGTGTTGGAAATGCTTTTGAAACA
CAGTCCTGTGAACCTACAAGAGGATGTCCAACAGAGGAGGGATGTGGAGAGCGTTTCAGGTGCTTTTCAG
GTCAGTGCATCAGCAAATCATTGGTTTGCAATGGGGATTCTGACTGTGATGAAGACAGTGCTGATGAAGA
CAGATGTGAGGACTCAGAAAGGAGACCTTCCTGTGATATCGATAAACCTCCTCCTAACATAGAACTTACT
GGAAATGGTTACAATGAACTCACTGGCCAGTTTAGGAACAGAGTCATCAATACCAAAAGTTTTGGTGGTC
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AACCGTTCATCAGAGGGGGAGGTGCAGGCTTCATATCTGGCCTTAGTTACCTAGAGCTGGACAATCCTGC
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TGTTGAGGGGACCCATTGTCTGTGCCATTGCAAACCGTACACATTTGGTGCGGCGTGTGAGCAAGGAGTC
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AGAAACGACAGAAAGCACACAATGCGAAGATGAGGAGCTGGAGCACTTGAGGTTGCTTGAACCACATTGC
TTTCCTTTGTCTTTGGTTCCAACAGAATTCTGTCCATCACCTCCTGCCTTGAAAGATGGATTTGTTCAAG
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GAAACCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209562 protein sequence
Red=Cloning site Green=Tags(s)

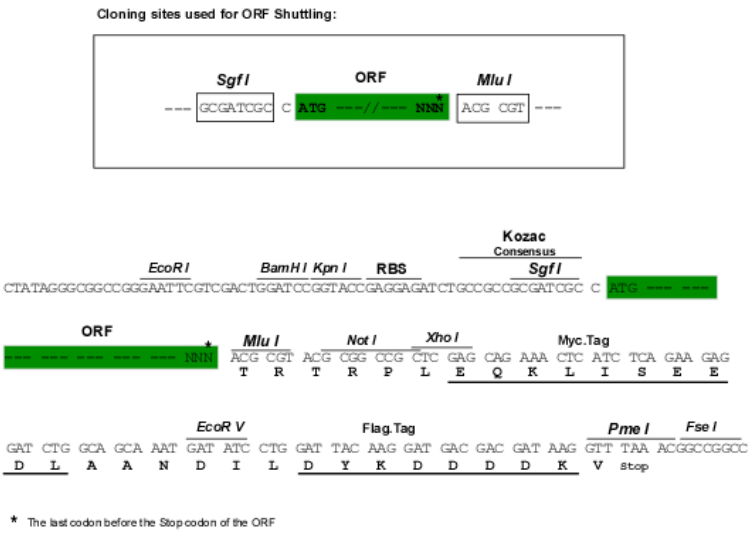
MKVISLFILVGFIGEFQSFSSASSPVNCQWDFYAPWSECNGCTKTQTRRRSVAVYGQYGGQPCVGNAFET
QSCEPTRGCPTEEGCGERFRCFSGQCISKSLVCNGDSDCDEDSADEDRCEDSERRPSCDIDKPPPNIELT
GNGYNELTGQFRNRVINTKSFGGQCRKVFSGDGKDFYRLSGNVLSYTFQVKINNDFNYEFYNSTWSYVKH
TSTEHTSSSRKRSFFRSSSSSSRSYTSHTNEIHKGKSYQLLVVENTVEVAQFINNNPEFLQLAEPFWKEL
SHLPSLYDYSAYRRLIDQYGTHYLQSGSLGGEYRVLFYVDSEKLKQNDFNSVEEKKCKSSGWHFVVKFSS
HGCKELENALKAASGTQNNVLRGEPFIRGGGAGFISGLSYLELDNPAGNKRRYSAWAESVTNLPQVIKQK
LTPLYELVKEVPCASVKKLYLKWALEEYLDEFDPCHCRPCQNGGLATVEGTHCLCHCKPYTFGAACEQGV
LVGNQAGGVDGGWSCWSSWSPCVQGKKTRSRECNNPPPSGGGRSCVGETTESTQCEDEELEHLRLLEPHC
FPLSLVPTEFCPSPPALKDGFVQDEGTMFPVGKNVVYTCNEGYSLIGNPVARCGEDLRWLVGEMHCQKIA
CVLPVLMDGIQSHPQKPFYTVGEKVTVSCSGGMSLEGPSAFLCGSSLKWSPEMKNARCVQKENPLTQAVP
KCQRWEKLQNSRCVCKMPYECGPSLDVCAQDERSKRILPLTVCKMHVLHCQGRNYTLTGRDSCTLPASAE
KACGACPLWGKCDAESSKCVCREASECEEEGFSICVEVNGKEQTMSECEAGALRCRGQSISVTSIRPCAA
ETQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6527_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000587

ORF Size: 2529 bp

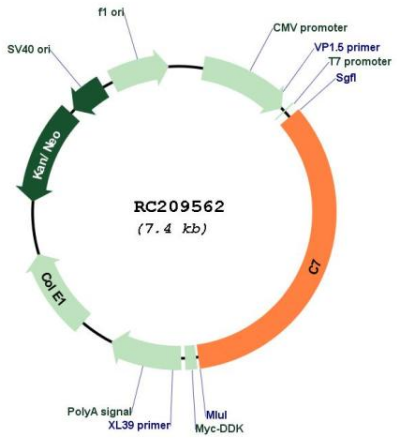
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

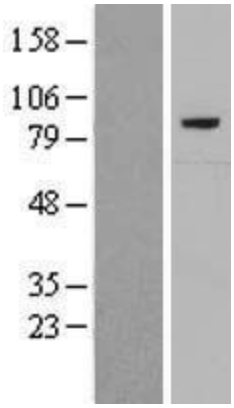
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_000587.4
RefSeq Size:	4034 bp
RefSeq ORF:	2532 bp
Locus ID:	730
UniProt ID:	P10643
Cytogenetics:	5p13.1
Domains:	CCP, tsp_1, MACPF, ldl_recept_a, FIMAC
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Complement and coagulation cascades, Prion diseases, Systemic lupus erythematosus
MW:	93.5 kDa
Gene Summary:	This gene encodes a serum glycoprotein that forms a membrane attack complex together with complement components C5b, C6, C8, and C9 as part of the terminal complement pathway of the innate immune system. The protein encoded by this gene contains a cholesterol-dependent cytolysin/membrane attack complex/perforin-like (CDC/MACPF) domain and belongs to a large family of structurally related molecules that form pores involved in host immunity and bacterial pathogenesis. This protein initiates membrane attack complex formation by binding the C5b-C6 subcomplex and inserts into the phospholipid bilayer, serving as a membrane anchor. Mutations in this gene are associated with a rare disorder called C7 deficiency. [provided by RefSeq, Nov 2016]

Product images:



Circular map for RC209562



Western blot validation of overexpression lysate (Cat# [LY424620]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209562 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).