

## Product datasheet for **RC201655**

### RFC3 (NM\_002915) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RFC3 (NM_002915) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RFC3
Synonyms:	RFC38
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201655 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCCTCTGGGTGGACAAGTATCGGCCCTGCTCCTTGGGACGGCTGGACTATCACAAGGAGCAGGCGG  
CCCAGTGCAGAACCTGGTGCAGTGTGGTACTTTCCTCATCTGTTAGTGTACGGACCATCAGGTGCTGG  
AAAAAGACAAGAATTATGTGTATTCTACGTGAACCTTTATGGTGTGGAGTGGAAAAATTGAGAATTGAA  
CATCAGACCATCACAACCTCCATCTAAAAAATTGAAATTAGCACCATTGCAAGTAACTACCACCTTG  
AAGTTAATCCTAGTGATGCTGGAATAGTGACCGAGTAGTCATTGAGGAGATGTTGAAAACAGTGGCACA  
ATCACAACAACCTGAAACAACTCTCAAAGGGATTTAAAGTGGTATTATTGACAGAAGTTGACAAACTC  
ACCAAAGATGCTCAGCATGCCTTGCGAAGAACCATGGAAAAATATATGTCTACCTGCAGATTGATCTTGT  
GCTGCAATTCTACATCTAAAGTATCCACCTATTTCGTAGTAGGTGCTTGGCGGTTTCGTGTGCCTGCTCC  
CAGCATTGAAGATATTTGCCACGTGTTACTACTGTGTGAAGAAGGAAGGTCTGAATCTTCCTTCAACA  
CTGGCTCATAGACTTGCAGAGAAGTCTTGTAGAAATCTCAGAAAAGCCCTGCTTATGTGTGAAGCCTGCA  
GAGTGCAACAATATCCTTTTACTGCAGATCAAGAAATCCCTGAGACAGATTGGGAGGTGTATCTGAGGGA  
GACTGCAAAATGCTATTGTGAGTCAAGAACTCCACAAAGGCTCCTTGAAGTTCGTTGGAAGGCTGTATGAG  
CTTCTAACTCATTGTATTCTCCTGAGATAATAATGAAGGCTTCTCTCAGAAGTGTACATAATTGTG  
ATGGCAACTGAAAGGGGAGGTGGCACAATGGCAGCTTACTATGAGCATCGTCTACAGCTGGGTAGCAA  
AGCCATTTATCACTTGGAAAGCGTTTGTGGCCAAATTCATGGCACTTTATAAGAAGTTCATGGAGGATGGA  
TTGAAGGCATGATGTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201655 protein sequence  
Red=Cloning site Green=Tags(s)

MSLVWDKYRPCSLGRLDYHKEQAAQLRNLVQCGDFPHLLVYGPSGAGKKTRIMCILRELYGVGVEKLRIE  
 HQTITTPSKKKIEIETIASNYHLEVNPSDAGNSDRVVIQEMLKTVAQSQQLETNSQRDFKVVLLTEVDKL  
 TKDAQHALRRTMEKYMSTCRLILCCNSTSKVIPPISRCLAVRVPAPSIEDICHVLSTVCKKEGLNLP  
 LAHRLAEKSCRNLRKALLMCEACRVQQYPFTADQEIPETDWEVYLRETANAIVSQQTPQRLLLEVRGRLYE  
 LLTHCIPPEIIMKGLLSELLHNC D GQLKGEVAQMAAYYEHRLQLGSKAIYHLEAFVAKFMALYKKFMEDG  
 LEGMMF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6299\\_a08.zip](https://cdn.origene.com/chromatograms/mk6299_a08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002915

**ORF Size:** 1068 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_002915.4](#)

**RefSeq Size:** 2396 bp

**RefSeq ORF:** 1071 bp

**Locus ID:** 5983

**UniProt ID:** [P40938](#)

**Cytogenetics:** 13q13.2

**Domains:** AAA

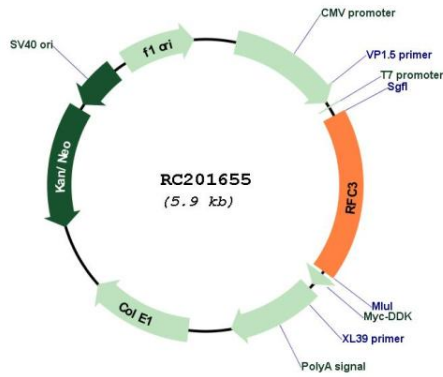
**Protein Families:** Stem cell - Pluripotency

**Protein Pathways:** DNA replication, Mismatch repair, Nucleotide excision repair

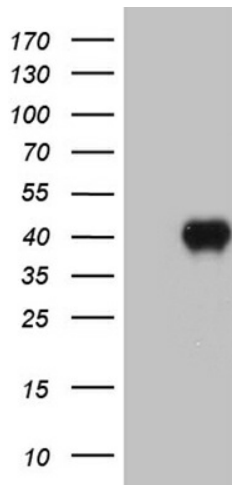
**MW:** 40.6 kDa

**Gene Summary:** The elongation of primed DNA templates by DNA polymerase delta and DNA polymerase epsilon requires the accessory proteins proliferating cell nuclear antigen (PCNA) and replication factor C (RFC). RFC, also named activator 1, is a protein complex consisting of five distinct subunits of 140, 40, 38, 37, and 36 kDa. This gene encodes the 38 kDa subunit. This subunit is essential for the interaction between the 140 kDa subunit and the core complex that consists of the 36, 37, and 40 kDa subunits. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]

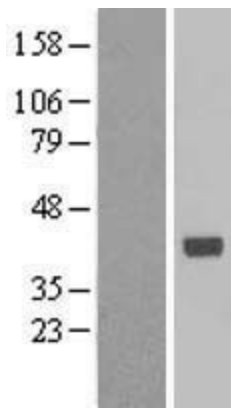
Product images:



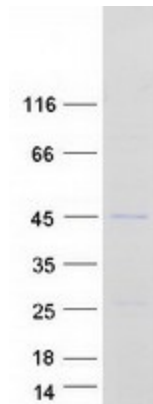
Circular map for RC201655



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RFC3 (Cat# RC201655, 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-RFC3 (Cat# [TA811874]). Positive lysates [LY419018] (100ug) and [LC419018] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419018]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201655 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RFC3 protein (Cat# [TP301655]). The protein was produced from HEK293T cells transfected with RFC3 cDNA clone (Cat# RC201655) using MegaTran 2.0 (Cat# [TT210002]).