

## Product datasheet for **RC211392**

### RFC4 (NM\_181573) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RFC4 (NM_181573) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RFC4
Synonyms:	A1; RFC37
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211392 representing NM_181573 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAAGCATTCTTAAAGGTACATCCATCAGTACTAAACCCCGCTGACCAAGGATCGAGGAGTAGCTG  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC211392 representing NM\_181573  
Red=Cloning site Green=Tags(s)

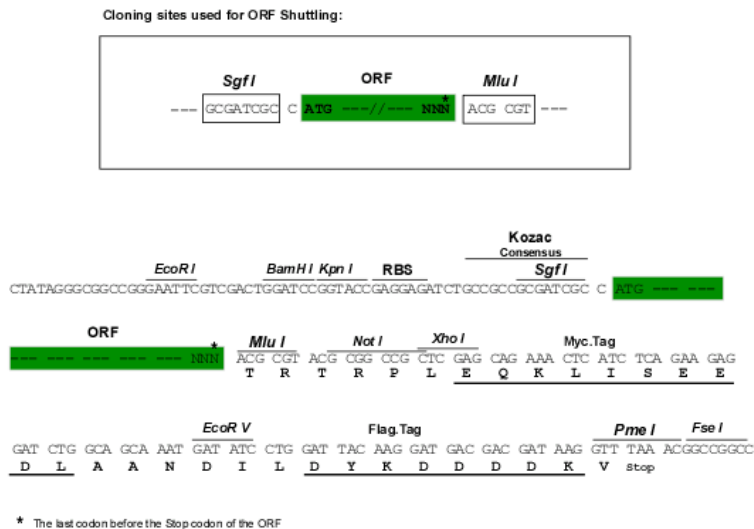
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 LCATVMQQLSQNC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6576\\_c11.zip](https://cdn.origene.com/chromatograms/mk6576_c11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_181573

**ORF Size:** 1089 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\\_181573.2](#), [NP\\_853551.1](#)

**RefSeq Size:** 1395 bp

**RefSeq ORF:** 1092 bp

**Locus ID:** 5984

**UniProt ID:** [P35249](#)

**Cytogenetics:** 3q27.3

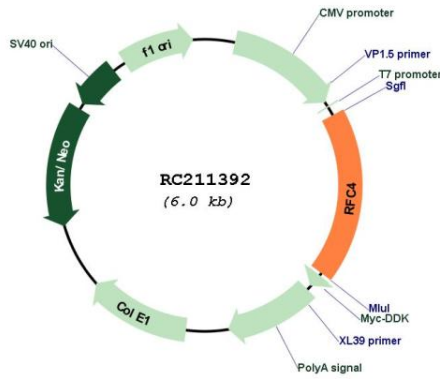
**Protein Families:** Druggable Genome, Stem cell - Pluripotency

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

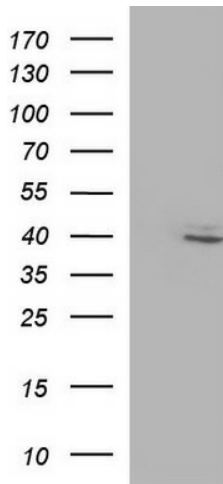
**MW:** 39.5 kDa

**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 kD. This gene encodes the 37 kD subunit. This subunit forms a core complex with the 36 and 40 kDa subunits. The core complex possesses DNA-dependent ATPase activity, which was found to be stimulated by PCNA in an in vitro system. Alternatively spliced transcript variants encoding the same protein have been reported. [provided by RefSeq, Jul 2008]

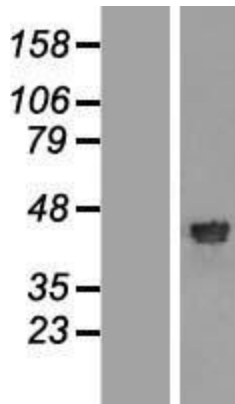
Product images:



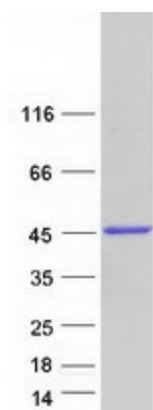
Circular map for RC211392



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RFC4 (Cat# RC211392, 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-RFC4 (Cat# [TA590357]). Positive lysates [LY405706] (100ug) and [LC405706] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY405706]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211392 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RFC4 protein (Cat# [TP311392]). The protein was produced from HEK293T cells transfected with RFC4 cDNA clone (Cat# RC211392) using MegaTran 2.0 (Cat# [TT210002]).