

Product datasheet for **RC201652**

RTF2 (NM_016407) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTF2 (NM_016407) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RTF2
Synonyms:	C20orf43; CDAO5; HSPC164; RTFDC1; SHUJUN-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201652 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTTGCGACGGGGAAACAATCCCCAAGAGGCATGAACTGGTGAAGGGCCGAAGAAGGTTGAGAAGG
TCGACAAAGATGCTGAATTAGTGGCCCAATGGAATATTGTACTTAAGTCAGGAAATATTAAGACGACC
AATAGTTGCCTGTGAACCTGGCAGACTTTATAACAAAGATGCCGTCATTGAATTTCTCTGGACAAATCT
GCAGAAAAGGCTCTTGGGAAGGCAGCATCTCACATTAAGCATTAAAGAATGTGACAGAGCTGAAGCTTT
CTGATAATCCTGCCTGGGAAGGGGATAAAGGAAACACTAAAGGTGACAAGCACGATGACCTCCAGCGGGC
GGTTTTCATCTGCCCGTTGTGGCCTGGAGATGAACGGCCGACACAGGTTCTGCTTCTTCGGTGTCTGC
GGCTGTGTGTTTTCTGAGCGAGCCTTGAAGAGATAAAAAGCGGAAGTTTGCCACACGTGTGGGGCTGCCT
TCCAGGAGGATGATGTCATCGTGTCAATGGCACCAAGGAGGATGTGGACGTGCTGAAGACAAGGATGGA
GGAGAGAAGGCTGAGAGCGAAGCTGGAAAAGAAAACAAAGAAACCAAGGCAGCAGAGTCTGTTTCAAAA
CCAGATGTCAGTGAAGAAGCCCCAGGGCCATCAAAAGTTAAGACAGGGAAGCCTGAAGAAGCCAGCCTTG
ATTCTAGAGAGAAGAAAACCACTTGGCTCCAAAAGCACAGCAATGAATGAGAGCTCTTCTGGAAAAGC
TGGGAAGCCTCCGTGTGGAGCCACAAAGAGGTCCATCGCTGACAGTGAAGAATCGGAGGCCTACAAGTCC
CTCTTTACCACTCACAGCTCCGCCAAGCGCTCCAAGGAGGAGTCTGCCACTGGGTCACCCACACGTCCT
ACTGCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC201652 protein sequence
Red=Cloning site Green=Tags(s)

MGCDGGTIPKRHEL VKGPKKVEKVDKDAELVAQWNYCTL SQEILRRPIVACELGRLYNKDAVIEFLLDKS
 AEKALGKAASHIKSIKNVTELKLSDNPAWEGDKGNTKGDKHDDLQRARFICPVVGLMNGRHRFCFLRCC
 GCVFSERALKEIKAEVCHTCGAAFAQEDDDIVLNGTKEDVDVLKTRMEERRLAKLEKTKKPKAAESVSK
 PDVSEEAPGPSKVKTGKPEEASLDSREKKTNLAPKSTAMNESSSGKAGPPCGATKRSIADSESEAYKS
 LFTTHSSAKRSKEESAHWVTHTSYCF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6299_f06.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_016407

ORF Size: 918 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_016407.5](#)

RefSeq Size: 1672 bp

RefSeq ORF: 921 bp

Locus ID: 51507

UniProt ID: [Q9BY42](#)

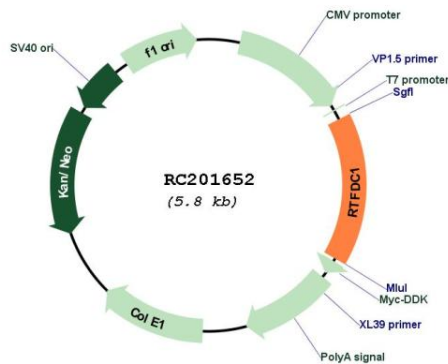
Cytogenetics: 20q13.31

Domains: DUF602

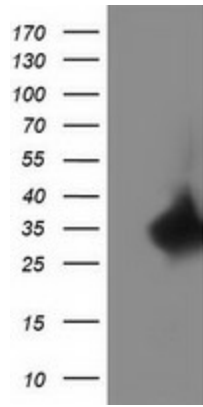
MW: 33.9 kDa

Gene Summary: Replication termination factor which is a component of the elongating replisome (Probable). Required for ATR pathway signaling upon DNA damage and has a positive activity during DNA replication. Might function to facilitate fork pausing at replication fork barriers like the rDNA. May be globally required to stimulate ATR signaling after the fork stalls or encounters a lesion (Probable). Interacts with nascent DNA (PubMed:29290612).[UniProtKB/Swiss-Prot Function]

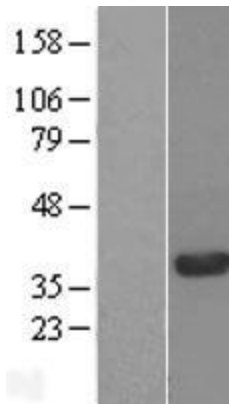
Product images:



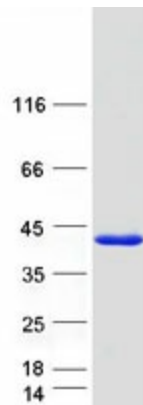
Circular map for RC201652



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY C20orf43 (Cat# RC201652, 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-C20orf43(Cat# [TA502375]). Positive lysates [LY414003] (100ug) and [LC414003] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414003]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201652 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RTF2 protein (Cat# [TP301652]). The protein was produced from HEK293T cells transfected with RTF2 cDNA clone (Cat# RC201652) using MegaTran 2.0 (Cat# [TT210002]).