

Product datasheet for **RG229158**

RFC5 (NM_181578) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RFC5 (NM_181578) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RFC5
Synonyms: RFC36
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229158 representing NM_181578
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTGAAAAATACCGGCCACAGACCCTGAATGATCTCATTCTCATCAGGACATTCTGAGTACCATTC
AGAAGTTTATCAATGAAGACCGACTGCCCACTTGCTTCTACGGTCCCCAGGGACAGGCAAGACATC
TACCATCCTAGCCTGTGCGAAACAGCTATATAAGACAAAGAATTGGCTCCATGGTCTTGGAGCTGAAT
GCTTCAGATGACCGAGGAATAGACATCATTGAGGACCGATCCTGAGCTTTGCTAGCACAAAGACAATAT
TTAAGAAAGGCTTTAAGCTAGTGATCTTGGATGAAGCAGACGCCATGACTCAGGACGCCAGAATGCCTT
GAGAAGAGTAATTGAGAAATTCACAGAAAATACCAGATTCGCTCATCTGTAATATCTGTCAAAGATC
ATCCCTGCCTTGCACTCCCGCTGCACGAGGTTTCGGTTCGGTCCCCTGACTCCTGAACTCATGGTCCCC
GCCTGGAACATGTGCTGGAAGAAGAGAAAGTTGATATAAGTGAAGATGGAATGAAAGCACTAGTCACTCT
TTCCAGTGGAGACATGCGTAGGGCTCTGAACATTTTGCAGAGCACCAATATGGCCTTTGGGAAGGTGACA
GAGGAGACTGTCTACACCTGCACCGGCCACCCGCTCAAGTCAGACATTGCCAACATCCTGGACTGGATGT
TGAATCAAGATTTACCACAGCCTACAGAAATATTACAGAGTTGAAAACCTCTGAAGGGTTGGCACTGCA
TGATATCCTGACAGAGATACACTTGTGTTGTCATAGAGTTGACTTCCATCTTCAGTTCGAATACATTTA
TTGACCAAAATGGCAGACATTGAGTACAGGCTTCTGTTGGCACCACGAGAAGATCCAGCTGAGCTCCC
TCATTGCTGCATTTCAAGTCACCAGAGACCTGATTGTTGCAGAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG229158 representing NM_181578
Red=Cloning site Green=Tags(s)

MVEKYRPQTLNDLISHQDILSTIQKFINEDRPLPHLLLYGPPGTGKTSTILACAKQLYKDKEFGSMVLELN
 ASDDRGIDIIRGPILSFASTRTRIFKKGFKLVILDEADMTQDAQNALRRVIEKFTENTRFCLICNYLSKI
 IPALQSRCTRFRFGPLPELMVPRLEHVVEEEKVDISEDGMKALVTLSSGDMRRALNILQSTNMAFGKVT
 EETVYTCTGHPLKSDIANILDWMLNQDFTTAYRNITELKTLKGLALHDILTEIHLFVHRVDFPSSVRIHL
 LTKMADIEYRLSVGTNEKIQLSSLIAAFQVTRDLIVAEA

TRTRPLE - GFP Tag - V

Restriction Sites:

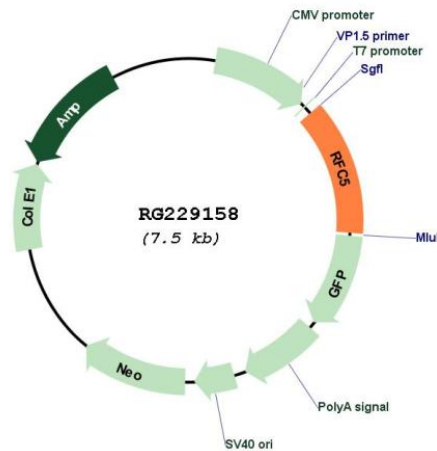
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_181578

ORF Size: 957 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_181578.4
RefSeq Size:	2486 bp
RefSeq ORF:	960 bp
Locus ID:	5985
UniProt ID:	P40937
Cytogenetics:	12q24.23
Protein Families:	Stem cell - Pluripotency
Protein Pathways:	DNA replication, Mismatch repair, Nucleotide excision repair
Gene Summary:	This gene encodes the smallest subunit of the replication factor C complex, which consists of five distinct subunits (140, 40, 38, 37, and 36 kDa) and is required for DNA replication. This subunit interacts with the C-terminal region of proliferating cell nuclear antigen and is required to open and load proliferating cell nuclear antigen onto DNA during S phase. It is a member of the AAA+ (ATPases associated with various cellular activities) ATPase family and forms a core complex with the 38 and 40 kDa subunits that possesses DNA-dependent ATPase activity. A related pseudogene has been identified on chromosome 9. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2016]