

Product datasheet for **SC113686**

RFWD3 (NM_018124) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RFWD3 (NM_018124) Human Untagged Clone
Tag:	Tag Free
Symbol:	RFWD3
Synonyms:	FANCW; RNF201
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_018124, the custom clone sequence may differ by one or more nucleotides

```

ATGGCTCATGAAGCAATGGAATATGATGTTTCAGGTGCAGTTAAATCATGCCGAACAACAGCCAGCTCCTG
CTGGCATGGCCAGCAGCCAAGGGGGACCAGCCCTCCTCCAGCCTGTTCTGCTGATGTGGTCAGCAGCCA
GGGGGTACCATCCATCCTCCAGCCAGCTCCTGCTGAGGTGATCAGCAGCCAAGCGACACCACCCCTGCTC
CAGCCTGCTCCGCAACTGTCTGTTGACCTGACAGAAGTGGAGGTCTTGGGAGAAGACACTGTGGAGAACA
TCAATCCAAGAACTTCAGAACAAACATAGGCAGGGATCTGATGGTAATCACACCATCCCAGCATCTTCGTT
GCATTCAATGACCAACTTCATCAGCGGACTGCAGAGACTTCATGGCATGCTGGAATTCCTGAGACCTTCA
TCTTCAAACCACAGTGTAGGGCCAATGAGAACAAGAAGGAGGGTATCTGCTTCACGGAGGGCAAGAGCCG
GAGGGTCTCAGAGGACAGACAGTGCCAGGTTGAGAGCACCATTGGATGCTTACTTTCAGGTGAGCAGGAC
CCAGCCTGACTTGCCAGCTACCACTTATGATTGAGAGACTAGGAATCCTGTATCTGAAGAGTTGCAGGTG
TCTAGTAGTTCTGATTCTGACAGTGACAGCTCTGCAGAGTATGGAGGGGTGTTGACCAGGCAGAGGAAT
CTGGAGCTGTCATTTTAGAAGAGCAACTAGCAGGTGTCTCAGCAGAGCAAGAAGTTACATGTATCGATGG
AGGCAAGACCCTCCCCAACAGCCATCTCCCAGAAAGTCTGAGCCTCTGCTACCTTCTGCTTCTATGGAT
GAGGAAGAAGGGGACACTTGTACAATATGTCTGGAACAGTGGACCAATGTGAGGGACCACCGGCTCTCAG
CATTACGCTGTGGGCATCTCTTTGGGTATAGGTGCATTTCCACGTGGCTTAAAGGACAAGTACGAAAATG
TCCCCAGTGCAACAAGAAAGCCAGGCACAGTGACATTGTCGTCCTTTATGCCCGAACCTGAGAGCTTTG
GACACTAGTGAACAGGAGCGCATGAAAAGTTCCTACTGAAGGAACAGATGCTAAGGAAACAGGCCGAGT
TAGAATCAGCACAGTGCCGACTCCAACATGCAGGTCTCTACTGATAAGTGCAGTACGCTTCAAAGGCGTGT
TCAGGACTTGCAAAAACCTTACGTCACATCAAAGTCAGAATTTACAGCAACCCAGGGGCTCCCAAGCATGG
GTCCTGAGCTGCTCACCCTCCAGCCAGGGCCAGCACAAGCACAAGTACCACTTCCAAAAGACCTTCACAG
TATCTCAGGCAGGAAACTGCCGGATCATGGCATACTGTGATGCTCTGAGCTGCCTGGTGATATCACAGCC
TTCTCCTCAGGCCTCTTTTCTTCCAGGCTTTGGTGTAAAGATGTTGAGTACTGCCAACATGAAGAGCAGT
CAGTACATTCCGATGCATGGCAAACAGATCCGTGGACTGGCGTTTAGCAGTTACCTCAGAGGCTTGCTAC
TCTCTGCTTCCCTAGACAACACTATTAACTGACCAGCCTGGAGACAAATACCGTGGTCCAGACTTATAA
TGCTGGACGTCTGTCTGGAGCTGTTGCTGGTGTCTTGATGAGGCTAACTACATCTATGCTGGACTGGCC
AATGGTTCAATTCTGGTATATGACGTGCGAAACACGAGCAGTCATGTGCAGGAGTTAGTAGCTCAGAAAG
CCAGATGCCCACTGGTCTCCCTGTCATACATGCCAGAGCTGCCTCAGCTGCATTTCCATATGGTGGGT
GCTGGCTGGAACCTTGGAGGATGCTTCATTCTGGGAACAGAAAATGGACTTTTCTATTGGCCTCATGTG
CTGCCCTTGGAGCCAGGGGGCTGCATAGACTTTCAGACAGAGAACAGCTCCCGGCACTGTCTTGTGACCT
ACAGGCCTGATAAAAATCACACCACCATACGAAGTGTGCTGATGGAAATGTCTACCGACTGGATGACAC
TGGAAATCCAATCTGCTCCTGCCAGCCTGTACATACATTTTTTGGAGGACCTACTTGCAAACTATTGACC
AAAAATGCCATTTTCAAAGCCCAGAGAATGATGGCAACATCCTGGTGTGTAAGGGGATGAAGCAGCAA
ATTCTGCCCTGCTGTGGGATGCTGCCAGTGGCTCGTTGCTCCAGGACCTACAGACCGATCAGCCTGTGT
GGACATCTGCCCATTTGAGGTGAACCGTAACAGCTACTTGGCTACCTTAACAGAGAAGATGGTCCACATC
TATAAGTGGGAGTGA
    
```

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018124 unedited
 NGGTTCAAATTTGTATACGACTCATATAGGCGGCCGGAATTCGCCCAGCCCGTGGCTTA
 AAGGACAAGTACGAAAATGTCCCCAGTGAACAAGAAAGCCAGGCACAGTGACATTGTGC
 TCCTTTATGCCCCAACCTGAGAGCTTTGGACACTAGTGAACAGGAGCGCATGAAAAGTT
 CCCTACTGAAGGAACAGATGCTAAGGAAACAGGCCGAGTTAGAATCAGCACAGTGCCGAC
 TCCAACATGCAGGTCCTCACTGATAAGTGCACTAGGCTTCAAAGGCGTGTTCAGGACTTGC
 AAAAATTACGTACATCAAAGTCAGAAATTTACAGCAACCCAGGGGCTCCCAAGCATGGG
 TCCTAAGCTGCTCACCCTCCAGCCAGGGCCAGCACAAGCACAAGTACCATTCCAAAAGA
 CCTTCACAGTATCTCAGGCAGGAACTGCCGGATCATGGCATACTGTGATGCTCTGAGCT
 GCCTGGTGATATCACAGCCTTCTCCTCAGGCCTCTTTCTTCCAGGCTTTGGTGTTAAGA
 TGTTGAGTACTGCCAACATGAAGAGCAGTCAGTACATTCCGATGCATGGCAAACAGATCC
 GTGGACTGGCGTTTAGCAGTTACCTCAGAGGCTTGCTACTCTGCTTCCCTAGACAACA
 CTATTAAGTACCAGCCTGGAGACAATACCGTGGTCCCAGACTTATATGCTGNACGTNC
 TGTCTGGAGCTNGTGTGCTGTCTTGATGAGGCTAACTACATCTATGCTGGACTGGCCAT
 GGNTCATTCTGTATATGACGTGCGAACACGAGCAGTCATGTGCAGGAGTTAGTAGCTCA
 AAAAGCAGAGCCCACTGGNCTCCTGNCATCATGCCCAAAGTGNCTAGCTGCATTCCAAAG
 GNGGGGGGCTGGT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_018124 unedited
 CTTGGCCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTACATAGCAAATT
 CTTTATTTTCATATTAACAGTAAACATAAAACAGAAACATTAACAGGGCATAAACAG
 AGTTCCCATGGCCCTGTTTTCAAAGCAGGGGCAAGAATACATACAATGACAAGACATTTT
 GAGTTCGTTTAACTCCAATCCTCAAGTGGGGAAAAAACTTAGAGGTAGTGACAAAGGA
 ATATGGTGGGGCAGAGACTGGTGAGGCCAGAAGACTAAAGCCTGGATTATATAATGTGA
 TGTCTACAACGGGGACTGGGAATGGCATCAGGGTTTTTTTTTTGTTTGTGTTTTTTTT
 GAGATGGAGTCTTGCTCTGTACCGAGGCTGGAGTGCAGTGGCGCGATCTCGACTCACTG
 CAACCTCTGCCTCCCAGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGA
 CTACAGGCATGCGCACCCTGCACCCAGTTAATTTTTGTATTTTAGTAGAGATGGGGTT
 TCACCATGTTGGTCAGGCTGGACAAGGCTTTTTTTCTTTGGAGAAATCACTCACGATCGT
 ATGAATTTGCTTCCAAACATCCAAATTTAATGTACTAATGCAAGGACTGGTAAGACTTA
 AGATCACATAACGTCCCTCATAGTTAAGTCTCTTGCTTCTACTATTAGTGGAATAATC
 AGCATCAGGTACCTTCAAAGAAAGTCAAATCCTAAACCTGCCCCAGCCCCAAAGACAAA
 GCCAGCCCGGAACCTGACCACCCTGTATCCTTCTTGNTGGCAATTCTGCTGAAACCCAC
 AAGAGTTCTGCTTTCTAATTCCAATCCTTATTTGGCCCTGAAACTAAGCCTGGGCCACCC
 CTCTTAATTTAACCTATCCAAAGGATTCTTCTTTGAAAAAACTTTTCTTAAGTTCAG
 GAACTAATTTACAAAAACGTCTCAATAGGGCCCGGGCCTGG

Restriction Sites:

NotI-NotI

ACCN:

NM_018124

Insert Size:

4640 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<u>NM_018124.2, NP_060594.2</u>
RefSeq Size:	4952 bp
RefSeq ORF:	1254 bp
Locus ID:	55159
UniProt ID:	<u>Q6PCD5</u>
Cytogenetics:	16q23.1
Domains:	WD40, RING
Protein Families:	Druggable Genome
Gene Summary:	E3 ubiquitin-protein ligase required for the repair of DNA interstrand cross-links (ICL) in response to DNA damage (PubMed:21504906, PubMed:21558276, PubMed:26474068, PubMed:28575657, PubMed:28575658). Plays a key role in RPA-mediated DNA damage signaling and repair (PubMed:21504906, PubMed:21558276, PubMed:26474068, PubMed:28575657, PubMed:28575658, PubMed:28691929). Acts by mediating ubiquitination of the RPA complex (RPA1, RPA2 and RPA3 subunits) and RAD51 at stalled replication forks, leading to remove them from DNA damage sites and promote homologous recombination (PubMed:26474068, PubMed:28575657, PubMed:28575658). Also mediates the ubiquitination of p53/TP53 in the late response to DNA damage, and acts as a positive regulator of p53/TP53 stability, thereby regulating the G1/S DNA damage checkpoint (PubMed:20173098). May act by catalyzing the formation of short polyubiquitin chains on p53/TP53 that are not targeted to the proteasome (PubMed:20173098). In response to ionizing radiation, interacts with MDM2 and enhances p53/TP53 ubiquitination, possibly by restricting MDM2 from extending polyubiquitin chains on ubiquitinated p53/TP53 (PubMed:20173098).[UniProtKB/Swiss-Prot Function]