

Product datasheet for **MC221529**

Rfwd3 (NM_146218) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rfwd3 (NM_146218) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rfwd3
Synonyms:	BC027246
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221529 representing NM_146218
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGAAGTCGCGGTGCGCCAGGCGTCCGACTTGGTCCCCTCAGAGATGGATCATGAAGTGATATACA
 GTCATCTTCAGGGACCATTAGAGGGTACTATAGAACCAGCTACTCCAAGTGAAGTCGTCAGCAATGGGGC
 ACCTCTCCAGCCTGCCCTGCTGAACTGGCCAATAGCCAAGGTGGAGCACATGTTGAGCCTGCCCTGCT
 GAAGTGGTCAGCAGCCAAGATGGACTGCCACTTACAGCCTCTGCCACCAGCATCCATTGATTTGACGG
 AGGAAGTACAGCCCTCAGAAGAAAATATGGAGGTTGTCAATCCTGGAACCTCAGAGGAGCCTAGTCAGGG
 ATCTGGTCTAACCAACCGCCGAGCTGCTAGATCCGTTTCAATGAACAACTTCATCAGCGGGCTGCAG
 AGGCTTCATAACATGCTGGAATTGCTGAGACCTCCACCTGCAGACCACAGTGTGGGGCCAATAAGAACA
 GGAGGAGGATGGACCCATTTTGGAGGCCAGAGCTGGAGAGTCTCAGAGGCAAGACAATGGCAGGTATGT
 GCCACATACACCACTATATGCCTACTTTAGGTAAAGCAGGTCTCAGCCTTACCCACTACCGCTGCTCAT
 GATTTCAGAGACCAGGAATCCACCGTCAGGCACTGACTCTGACAGCGATGGCTCTGCAGAGGATGAAGAGG
 TTGTTGTCCAGGCAGAAGAACCTGAAGCCAACATTCCAGAACAAGGAGTTATCGCAACAGACCAAGAAGC
 TACATCTGTCCAGGAGATGATGCACTCCCTAAAGAGTCTCCCCAGAAGCCCAACATGCTATCTGTATG
 GAAGATGAGGAAGGTGAACTTGCAACAATGTTTGAACAATGGACCAATGCTGGGGACCACCGGATCT
 CAGCGCTACGCTGTGGGCACCTCTTTGGATTTAGATGCATTTCTAAATGGCTCAAAGGACAAACACGAAA
 ATGTCCTCAGTGAACAAGAAAGCCAAGCACAGTGACATCGTTGTCAATTTATGCCGATCCCTGCGAGCT
 TTGGACACTAGTGAACAGGAGCGCATGAAAAGTGACTTACTGAATGAGCAAAATGCTCAGGAAGCAAGCTG
 AGTTAGAGTCTGCACAGTGCCCGCTCCAGCTTCAGGTCCTTATTGATAAGTGCCTAACTCAATAGCCG
 GTGCCAGGACTTGGAAAAGTTTGTGTGCGGCATCAGAAGTCCAGCTGCGCAGCAGTGCAGTCCGCTGAAA
 GCACTTTGTGGGAAATGCCTGTCTCCAGCCAGAGCCAGGCAAATACAGCTCAGAAAAGACCTTACCA
 TATCTCAGACGGGAAAATGCCGAATCTTGGCCTATTGTGATGGTCTGAGCTGCCTGGTGGCTCCCAGCC
 CTCCCCTCAGGCCTCCTTTCTCCAGGCTTTGGTGTAAAGATGTTGAGTACTGCCAACATGAAGAGCAGT
 CAGTATATTCCTATGCACAACAAGCAGATTTCGTGGATTATCTTTCAGCAGTCAGTCCAAAGGCTTGTCC
 TGTCTGCCTCCCTGACTGCCTATTAAGCTGACCAGCCTAGAAAACAATACTGTGGTGCAGACTTACAA
 CACTGGGCGTCTGTCTGGAGCTGCTGCTGGTGTCTTGACGAAAACAATTACGTCTATGCTGGACTAGCC
 AGTGGTCAATTCTGATCTATGACTTACGGAACACAAACACCTATATTCAGGAATTAGTTCCTCAGAAAG
 CCAGATGTCCTCTGGTATCCCTGTCATATTTACCAAAGCTGCAGTGGCTGCATTTCTTATGGTGGGGT
 GCTGGCTGGAACATTGGAGAATGCCTCCTTCTGGGAGCTAAAATCAGACTTTTCTCATAAGCCTCATGTG
 CTGTCTTGGAGCCAGGGGGCTTTGTAGACTTTCAGACAGAGAGCAGCACCCGCACTGTCTTGTGACTT
 ACAGACCTGATAAAAGCCATAACACTGTCCGAAGTGTGCTATTGGAGATGTCTTACAAACTGGACGATGC
 TGGAGAGCCGGTCTGTTCTGTCTTCTGTACAAAACATTCCTTGGGGGACCCACTTGCAAACTGTTGACC
 AAAAGTGCATCTTCAAAGCCAGAGAATAATGGCAATGTCTAGTATGTAAGTGGGATGAAGCGTCAC
 AGTCTACACTGTTGTGGAATGCTGGCAGTGGCTTGTGCTGCAGAACCTGAAGGCTGGTGAACCTGTCT
 GGACATCTGCCATTTGAAACGAATCAGAACAGCTATCTGGCCACCTTGACAGAGAAGACTGTCCATATG
 TACAAGTGGGAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_146218
Insert Size: 2325 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:	<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_146218.4 , NP_666330.2
RefSeq Size:	4443 bp
RefSeq ORF:	2325 bp
Locus ID:	234736
UniProt ID:	Q8CIK8
Cytogenetics:	8 E1
Gene Summary:	E3 ubiquitin-protein ligase required for the repair of DNA interstrand cross-links (ICL) in response to DNA damage. Plays a key role in RPA-mediated DNA damage signaling and repair. 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. 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. May act by catalyzing the formation of short polyubiquitin chains on p53/TP53 that are not targeted to the proteasome. 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. [UniProtKB/Swiss-Prot Function]