

## Product datasheet for **RG225219**

### **RWDD3 (NM\_001128142) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RWDD3 (NM\_001128142) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RWDD3  
**Synonyms:** RSUME  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG225219 representing NM\_001128142  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGAGCCTGTGCAGGAGGAGCTCTCGGTCCTGGCCGCGATTTCTGCAGGCCCCACGAGTGGGAGG  
TGCTGAGCCGCTCAGAGACAGATGGGACCGTGTTCAGAATTCACACAAAAGCTGAAGGATTTATGGATGC  
GGATATACCTCTGGAATTGGTGTCCATTTGCCAGTCAATTATCCTTCATGTCTACCTGGTATCTCGATT  
AACTCTGAACAGTTGACCAGGGCCAGTGTGTGACTGTGAAAGAGAATTTACTTGAGCAAGCAGAGAGCC  
TTTTGTGCGGAGCCTATGGTTCATGAGCTGGTTCCTGGATTTCAGCAGAATCTCAGGCATATCCTCAGCCA  
ACCAGAACTGGCAGTGGCAGTAAAAGTGTACTTTTTCAACAAGCACGACCATGGATGATGGATTGTGG  
ATAACTCTTTTGCAATTTAGATCACATGAGAGCAAAGACTAAATATGTCAAATTTGGAGAAGTGGGCTT  
CAGATTTAAGGCTGACAGGAAGACTGATGTTTCATGGGTAATAATACTGATTTTACTACAGGGAGACAG  
AAACAACCTCAAGGTGCCAAAAAGT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG225219 representing NM\_001128142  
**Red=Cloning site Green=Tags(s)**

MAEPVQEELSVLAAIFCRPHEWEVLSRSETDGTVFRIHTKAEGFMDADIPLLELVFHLVPVNYPSCLPGISI  
NSEQLTRAQCVTVKENLLEQAESLLSEPMVHELVLWIQQNLRHILSQPETGSGSEKCTFSTSTTMDGLW  
ITLLHLDHMRRAKTKYVKIVEKWASDLRLTGRLMFMGKIILILLQGDRNNLKVPKS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001128142.1, NP_001121614.1</u>
<b>RefSeq Size:</b>	1151 bp
<b>RefSeq ORF:</b>	588 bp
<b>Locus ID:</b>	25950
<b>UniProt ID:</b>	<u>Q9Y3V2</u>
<b>Cytogenetics:</b>	1p21.3
<b>Gene Summary:</b>	Enhancer of SUMO conjugation. Via its interaction with UBE2I/UBC9, increases SUMO conjugation to proteins by promoting the binding of E1 and E2 enzymes, thioester linkage between SUMO and UBE2I/UBC9 and transfer of SUMO to specific target proteins which include HIF1A, PIAS, NFKBIA, NR3C1 and TOP1. Isoform 1 and isoform 2 positively regulate the NF-kappa-B signaling pathway by enhancing the sumoylation of NF-kappa-B inhibitor alpha (NFKBIA), promoting its stabilization which consequently leads to an increased inhibition of NF-kappa-B transcriptional activity. Isoform 1 and isoform 2 negatively regulate the hypoxia-inducible factor-1 alpha (HIF1A) signaling pathway by increasing the sumoylation of HIF1A, promoting its stabilization, transcriptional activity and the expression of its target gene VEGFA during hypoxia. Isoform 2 promotes the sumoylation and transcriptional activity of the glucocorticoid receptor NR3C1 and enhances the interaction of SUMO1 and NR3C1 with UBE2I/UBC9. Has no effect on ubiquitination.[UniProtKB/Swiss-Prot Function]