

Product datasheet for SC334846

RWDD3 (NM 001278248) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: RWDD3 (NM_001278248) Human Untagged Clone

Tag: Tag Free RWDD3 Symbol: Synonyms: **RSUME Mammalian Cell**

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001278248, the custom clone sequence may differ by one or

more nucleotides

ATGTTTCTTTCCTGTGGTTCCCTGCACCAGAGAGGGCCCGAGACAGATGGGACCGTGTTCAGAATTCACA CAAAAGCTGAAGGATTTATGGATGCGGATATACCTCTGGAATTGGTGTTCCATTTGCCAGTCAATTATCC TTCATGTCTACCTGGTATCTCGATTAACTCTGAACAGTTGACCAGGGCCCAGTGTGTGACTGTGAAAGAG AATTTACTTGAGCAAGCAGAGACCTTTTGTCGGAGCCTATGGTTCATGAGCTGGTTCTCTGGATTCAGC AGAATCTCAGGCATATCCTCAGCCAACCAGAAACTGGCAGTGGCAGTGAAAAGTGTACTTTTTCAACAAG CACGACCATGGATGATGGATTGTGGATAACTCTTTTGCATTTAGATCACATGAGAGCAAAGACTAAATAT GTCAAAATTGTGGAGAAGTGGGCTTCAGATTTAAGGCTGACAGGAAGACTGATGTTCATGGGTAAAATAA TACTGATTTTACTACAGGGAGACAGAAACAACCTCAAGGAGTACTTGATTCTTCAGAAAACCTCCAAAGT AGATGTGGACTCAAGTGGAAAGAAATGCAAAGAGAAAATGATTAGTGTACTGTTTGAAACAAAAGTACAG ACAGAACACAAAAGGTTTCTGGCATTTGAAGTCAAAGAGTATTCAGCGTTGGATGAATTACAAAAGGAAT TTGAAACTGCAGGACTTAAGAAGCTTTTCTCCGAATTTGTACTTGCTCTGGTAAAA<mark>TGA</mark>

Restriction Sites: Sgfl-Mlul

ACCN: NM 001278248

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).



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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 001278248.1</u>, <u>NP 001265177.1</u>

 RefSeq Size:
 1383 bp

 RefSeq ORF:
 759 bp

 Locus ID:
 25950

 UniProt ID:
 Q9Y3V2

 Cytogenetics:
 1p21.3

Gene Summary: 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]

Transcript Variant: This variant (5) contains an alternate exon in the 5' region, and initiates

translation at an alternate start site, compared to variant 1. The encoded isoform (e) is shorter

and has a distinct N-terminus, compared to isoform a.