

Product datasheet for **RG218128**

WDR59 (NM_030581) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	WDR59
Synonyms:	CDW12; FP977; p90-120
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG218128 representing NM_030581
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGCACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGCGATGGAGCAGCGAAAACGTGGTTGTAGAGTTCGTGACTCCCAGGCAACTGCGATGTCTG
TGGACTGTCTTGGGCAGCATGCAGTGCTTTCTGGCCGAGATTCTTATACATCGTCAATCTAGATGCCCC
TTTCGAAGGTCACCGAAAGATCTCTCGCCAGAGCAAAATGGGACATTGGAGCTGTGCACTGGAATCCTCAT
GACAGCTTTGCACACTATTTTGCGGCTTCGAGTAACCAACGAGTAGACCTTTACAAGTGAAAGACGGCA
GTGGGGAAGTTGGCACAACCTTACAAGGCCCACTCGTGTCACTAGCGACTTGGACTGGGCGGTGTTTGA
GGCTGACCTCCTGGTTACCAGCTCTGTGGACACCTACATCTACATTTGGGATATCAAAGACACAAGGAAA
CCTACTGTTGCACTGTCTGCTGTTGCGGGTGCCTCCCAGGTCAAATGGAATAAAAAAATGCTAACTGCC
TTGCCACCAGCCATGACGGCGATGTGCGGATATGGGATAAGAGGAAACCCAGTACAGCAGTGAATATCT
AGCCGCCCACCTCTCCAAATCCATGGCTGGACTGGACCCAGACAGCGAGCACATTCTTGCTACCTCC
AGTCAAGACAATTCTGTGAAGTTCTGGGATTACCGCCAGCCTCGGAAATACCTCAATATTCTTCCTTGCC
AGGTGCCTGTCTGGAAGGCCAGATACACACCTTTCAGCAATGGATTGGTGACTGTGATGGTTCGCCAGCT
GCGGAGGGAACAGCCTTCTCCTGTGGAATGTCTTTGACTTGAACACCCAGTCCACACCTTCGTGGGG
CATGATGATGTGGTCTCGAGTTCAGTGGAGGAAGCAGAAGGAAGGGTCCAAGGACTATCAACTGGTGA
CGTGGTCCCGGGATCAGACCTTGAGAATGTGGCGGGTGGATTCCAGATGCAGAGGCTTTGTGCAATGA
CATATTAGATGGTGTGATGAGTTCATTGAGAGTATTTCCCTTCTGCCGGAACCTGAGAAGACCTGCAC
ACTGAAGATACAGATCACCAGCACACTGCAAGCCATGGGGAGGAAGAAGCCCTAAAAGAAGATCCCCCTA
GAAATCTCTGGAAGAGAGGAAATCAGATCAACTGGGGCTGCCTCAGACCTTGACAGGAAATTCTCCCT
GATCAATGTGCAAAATCCGGAATGTCAATGTGGAGATGGATGCGGCAGACAGGAGCTGCACAGTGTCTGTG
CACTGCAGCAACCATCGTGTCAAGATGCTGGTGAAGTTCCTGCACAGTACCCAAACAACGCCGCCCTT
CCTTCCAGTTTATTAACCCACAACCATCACATCCACCATGAAAGCTAAGTGTCTGAAGATCCTGAAGGA
CACAGCCCTGCAGAAAGTGAAGCGTGGCCAGAGCTGCCTGGAGCCCTGCCTGCGCCAGCTCGTCTCCTGC
CTTGAGTCCCTTTGTGAACCAGGAAGACAGCGCTTCCAGCAACCCGTTTGCACTCCCCAACTCTGTCACTC
CCCCCTTACCAGCGTTTGCAGCGGTGACACGGCTTACGGGTCTGACCAGGACGCCAACATTCCTTTTCC
TAGGACTTCTGGGGCCAGGTTCTGCGGAGCAGGTTACCTGGTATATTTACAAGGCCCATGACAATGCAT
CGGGCGGTGTCTCCACAGAGCCTACTCCGAGATCTCTCAGCCTTGTCTGCTTATCACTGGCTTGA
TCGCGCCCATGAAGATCCGCACAGAGGCCCTGGGAACCTTCGTTTATACAGTGGGAGCCCCACTCGCAG
CGAGAAAGAGCAGGTCTCCATCAGTCTTCTACTACAAGGAGCGGAAATCAAGACGATGGAAGTAAG
CGTGAGGGATCAGACTCTGGCAATCGACAGATCAAGGCTGCTGGGAAAGTCATCATCCAGGATATTGCTT
GCCTCCTGCCTGTTACAAATCGTGGGAGAGCTGTACATATTGAATGTGAATGATATTAGGAAACATG
TCAGAAGAATGCCGCTCTGCCTTGCTCGTTGGAAGAAAGGATCTTGTCAGGTTTGGTTCGCTGGCTACG
GTAGCTACAGATCTTGCCTTGGTCCGAAATCTGACCCAGATTGGAACACCCCTGGGCTCGACATCCAT
TTGGGCGGCAGCTGCTGGAGTCCCTGTTGGCTCACTATTGCCGGCTCCGGGATGTTGACACTGGCGAT
GCTCTGTAGCGTGTGGAAGCCAGTCTCGGCCTCAGGGGCTACCAAACCCCTTTGGGCTTTTCTCTAAC
CGTTCTTCTAATCTTGTGGTGTCCCATAGTCGATATCCTAGCTTTACCTCTTCTGTTTCTGCTCCAGTA
TGTCAGACCCAGGGCTCAACACTGGCGGCTGGAACATAGCGGGAAGAGAGGCAGAGCACTTGTCTCCCC
TTGGGGAGAATCCTCACCAGAAGAGCTCCGCTTTGGGAGTCTGACCTACAGTGATCCCCGTGAGCGAGAA
CGCGACCAGCATGATAAAAAATAAAGGCTCCTGGACCCGCCAATACCCAGCAATTTGATGACTTTAAGA
AATGCTATGGGGAAATCCTCTACCGTTGGGGTCTGAGAGAGAAGCGAGCTGAAGTGTTGAAGTTTGTCTC
CTGTCTCTGACCTCACAAAGGGATCGAGTTCGGCGTGTACTGCAGCCACTGCCGAGTGAGGTCCGT
GGCACGCAGTGTGCCATCTGCAAGGCTTACGTTCCAGTGTGCCATCTGTACGTGGCTGTGCGGGGAT
CGTCCAATTTCTGCCTGACCTGTGGGCACGGTGGCCACACCAGCCACATGATGGAGTGGTTTCGGACCCA
GGAGGTGTGTCCACCGGGTGTGGTGCCACTGCCTGCTTGAAGCACTTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218128 representing NM_030581

Red=Cloning site Green=Tags(s)

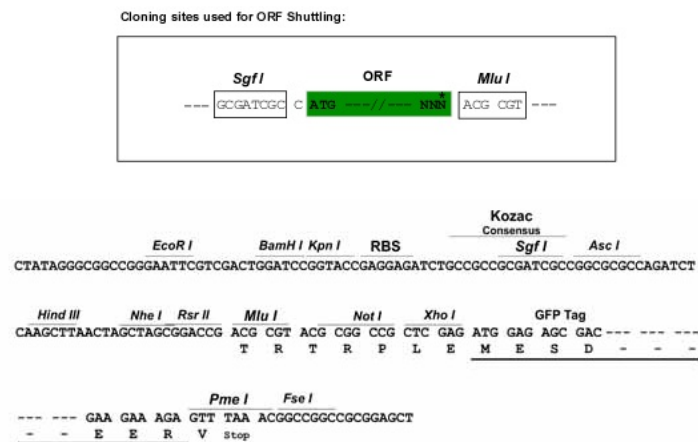
MAARWSSENVVVEFRDSQATAMSVDCLGQHAVLSGRRFLYIVNLDAFEGHRKISRQSKWDIGAVQWNP
DSFAHYFAASSNQVRDLYKWKDGSGEVGTTLQGHTRVISDLWAVFEPDLLVTSSVDYIYIWDIKDTRK
PTVALSAVAGASQVKWNKNANCLATSHDGDVRIWDRKPSTAVEYLAHL SKIHGLDWHPDSEHILATS
SQDNSVKFWDYRQPRKYLNLPCQVPVWKARYTPFSNGLVTVMVQLRRENSLLLWNVFDLNTPVHTFVG
HDDVVLFEQWRKQKEGSKDYQLVTWSRDQTLRMWRVDSQMQRLCANDILDGVDEFIESISLLPEPEKTLH
TEDTDHQHTASHGEEEALKEDPPRNLLEERKSDQLGLPQTLQQEFSLINVQIRNVNVEMDAADRSTVSV
HCSNHRVKMLVKFPAQYPNNAAPSFQFINPTTITSTMKAKLLKILKDTALQVKRGQSCLEPCLRQLVSC
LESFVNQEDSASSNPFPALNSVTPPLPTFARVTTAYGSYQDANIPFPRTSGARFCGAGLYVYFTRPMTMH
RAVSPTPTPRSLSALSAYHTGLIAPMKIRTEAPGNLRLYSGSPTRSEKEQVSISSFYKERSRRWKS
REGSDSGNRQIKAAGKVIIQDIACLLPVHKS LGELYILNVNDIQETCQKNAASALLVGRKDLVQVWSLAT
VATDLCLGPKSDPDLETPWARHPFGRQLLESLLAHYCRRLRDVQTLAMLCVFEAQSRRPQGLPNPFGFPN
RSSNLVVSRYPSFTSSGSCSSMDPGLNTGGWNIAGREAHLSSPWGESSPEELRFGSLTYS DPRERE
RDQHDKNRLLDPANTQQFDDFKKCYGEILYRWGLREKRAEVLKFVSCPPDPHKGIEFGVYCSHCRSEVR
GTQCAICKGFTFQCAICHVAVRGSSNFCLTCGHGGHTSHMMEWFRTQEVCTGCGCHCLESTF

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

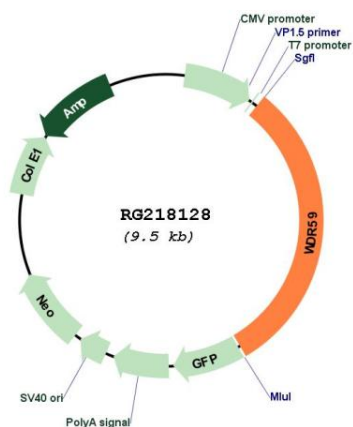


ACCN:

NM_030581

ORF Size:	2922 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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_030581.4
RefSeq Size:	3678 bp
RefSeq ORF:	2925 bp
Locus ID:	79726
UniProt ID:	Q6PJI9
Cytogenetics:	16q23.1
Domains:	WD40, RWD
Gene Summary:	As a component of the GATOR subcomplex GATOR2, functions within the amino acid-sensing branch of the TORC1 signaling pathway. Indirectly activates mTORC1 and the TORC1 signaling pathway through the inhibition of the GATOR1 subcomplex (PubMed:23723238). It is negatively regulated by the upstream amino acid sensors SESN2 and CASTOR1 (PubMed:25457612, PubMed:27487210).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG218128