

## Product datasheet for **MG216946**

### Wdr90 (NM\_001163766) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Wdr90
Synonyms:	3230401M21Rik; AI551153; mKIAA1924
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG216946 representing NM\_001163766  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGGCCGGAGGTAGCGGCGCGCGGAGACGCGCTGTCGTCAGGGCTCGCGTCCCGGGAGTCCCGGGTCCG  
AGGTCCCGCCCGCGTCACTGACTGGACCTCGTGCAAGAAGCCGTCGCCGGCGGAGGTGGAGGGTCCGG  
GCGCGCTGCCAGATCGGTGCTCAGGCGCGCTCCCTTCTGCAGCCTGGCAGCACCCCTTCTCAATGTA  
TTCAGACATTTCAGGGTGGATGAGTGGAAACGGTCCAGCAAAGAGGGAGATGTGGCTGTGGTGACGGACA  
AGGTCCGAAGAGCGCTGTGTATCGCATCCGTGGGTCTGTATCGCCAGCAACTACATCCAGCTCCCCAG  
AACTAGCACCCAGTCTCTGGGGCTGACTGGGCGGTACCTGTATGTGCTTTCCGGCCTGTGCTACCAAG  
CACTTTGTATCCACCTGGACGTGTCCACCGAGGACGGCCAGGTACATCCGTGTGCTTTCTCCAACCTCT  
TTAAGGAGTTCAAGTCTCCACAACGTGGCTTCAAGTCCCTTTGTCTTCGAGACTAAGACACCCAGGAG  
AGGTGGTGACATTTGGTCCAAGAGGGACGGCTTGAATGAAGGCCTAAAACGGGATGACCTGGCAGGTGTA  
GCTCTTCTCGTGCCCGCTGGACCTGCCTACAGCTGGACCTGCGTGACATCCTGATGTTCTACCTGGGCA  
GGCACTATAGTCATCTCAAGAGCATCAGGCTGTGTGCCAGCCTGCTAGTCAGAAACCTACACCAAGTGA  
TCTGTGCTTTGACCCTGCTGCTACTGTACTGAGGCCCGCGTGCAGAAAGTGTCTGTTAACCCATGCTC  
CGAGAAATGGCTTTCCCGGTGCCAAAAGGGGAGAGCTGGCATGACAATTACATCCACGTTCCGTTTCCAA  
GTGACTGTTCCAAGGTGCCTGATGAGCAGGATGAGAAGAGCTGTTCCCGCCAGAAAGCAGTCTTCTAGG  
TCGATGTACACGGCACCTGCCTCATCCAGGGTCTTGGGCAAACCTTTGCTGAGCAGTAAGTCCCCTGTG  
GCCAGGATGTAGCTCTGCATTGCCATGCCAGGTCTTTCAGCATCTAGTCGCCTTCCAGAGGTGACCC  
GGACCTACAGGTATCGAGAAGTCTCCAGTGAAGTGCCTCCAGCATCCAGAGCCAACGTCCTTCAGTTCC  
CGATGAGGTTCCCGATGCACACCGGTGTCCGGCGAGAGACACGTTCTTGTGACAGATCATCTGGCGTG  
CCCATGGCCCTTGAAGACATTTGGTTCTGTAGGCTTTTCTCCAGACCCAGTCTGAGGCTCAAGGGCG  
TCATCGGTTTTGGGGTACAGCACCAATGGGCCCTGTGGACAAAGATGGTGTGGCTGTGTTTACCC  
CTGCCATGCAGTCATAATTGTCTGCAGATTGACACTGGACAGCAGAGGTTTTCTTGGCCATACCGAC  
AAGTCTCTGCCCTGGCGCTCAATGGCAGTGATACGCTGCTAGCCTCAGCTCAGGTGACGCTCCAGCA



TGGTGCCTCTCTGGGACTTCCAGACTGGGAGTTGCCTGTCTCTCTTCAGAAGCCCACTGCACACCATCTG  
CTCCCTCAGCTTCTCTGGCAGCGGGGCACTCCTCTGCGGTGTGGCAAGGACAGACCGGGAGGACGGTG  
GTGGTGGCTGGAGTACAGACAGGCGGGCCTCGGCGGTGAGTCTGGTCTTTCGAAAAGTGCACACTG  
ACTTCGATATTTCGGGCCTTCCAGGTGGCCTTTTTGATGAAACCAGGATGGCATCATGTGGTCGGGGCAG  
CGTGAGGCTCTGGCGGTGCGGGGTGGTGTCTTCGGTCTGCGCTGTGGACCTGGGGGAGTACTGTTCA  
CTGGAGCTCACTGACCTTGCTTTGCACAGGCGTTGGATGGCCACTGTGCCCTCGGCCGGCACACTCT  
TTGTGTGCAGCCATAGTGGTACATCTGGAGATTGACCACCAGCGCATGTCGGTGCAGCAGTCCGCCG  
CTTGCTGCCTGCACGGTCCCCTGGTGTCTCCCTCGCCGAGAAGCAGAACTTAGCGTGGGGTCCGGCATC  
GCTATCAGTAGCCTCAGTGTCTCTACTGCCACATGTGCTGTGGGCTCTGAGGATGGCTACTTGCAGCTCT  
GGCCCCGGACTTTTCTCCGTGCTCTAGAGGCCGAACACGAGGCCCTGTGAGTTCGGTCTCCTTCAG  
TCCCAGTGGCTGCGTGTGCTGCCACCACCTTCAGGCCACTGGGCTTCTGGATGTCCTTCCGCTCCCGG  
GAGTAACTGTGTTGGCACGCTCCACATGGCCCAAGTGTGGCGTTTTCTACAGAACCAGAACCCGGGAC  
AGATGGCCACTGTGTCCCTTGACCACACTGTCGTATCTGGGACCTGGCTACCCTACAGCAGCTGTATGA  
CTTCTCGTCTCCGAGGACACCCCTTGCTGTGTTCCATCCACAATGCCAACTTCTTCTGTGGC  
TTCAGCAGTGGGGCGTGCCTTCTCAGCTTGAGAGCTCTGGAGTCCGGTGAACACACGCGTACC  
GAGGGGCCATCACCAGCTGTGCATCACCCTTGACGGCAGATTCTGTTCAGCTCCTGCTCTCAGGGCTC  
CCTAGTCCAGTACAGCTGTGCTGACTCTCAGTGTGCTGCTACGTGTGGCAGCCAACATGGTCTGTGAG  
GATGGTGCAGCCCAACCAATATTCTGGCAGTCACTGGAGACAGCTGCCGGTGGCTTTGTGGGCCCT  
CAAAGTGCATGGTACAATTGTGGAGTGGCCTCTTGGATGAGCTACTCCGTGTTGATGTGACAGCCCT  
CAACCTGGCCAGCAACCACCTGGACTGGCTGTGGCTATCTGCTCAGCCCGGAACTCAGGCCACTCTG  
CTGGTGTCCACATCCTTAACAAGGTTGTGGTACTGGATGCTGTGTGAGACACACCCCTCCGGGAGTTAT  
CTAGTGTCCGCTCCAGAGCCTGCTGCTCCCTGGCTCTCAGTGGAGTGTCTATTTGCTGTGGCAGCCAC  
TGACCCGACCATTACAGTATGGGATATCCAACACAGGCGAACCCAGCTGCCAGGTATACATTGGCCAC  
TCAGAGCCTGTGCACGCTGTAGCCTTACACCTGATCAGCTGCAGGTATCAGTGTGGGGATGCTATCT  
TCTCTGGGACATCCTGGTACCCCTGAGAGAGATGGAGGTGATCATGAAGACCCCAAGGGCATGAGGC  
CGGCTCTAGTTCGGGGCAGCTGGATGACCTGGCATCCGGGGCAGTGGACTCCTCGGCAGCAAGTGCC  
ATACCGTTTCAGGCATTACCGCTCCACTGAGTAGCCATGACAGGCTCCTTGACGGCAGTACTGGCACCT  
TCTCCAGCTGTGATGAGGAAGGACTCTGTGAGGAGAACCATGTTTTCTGAGGCGCTCCTCAAGGCCAGGC  
CCCCACCCACATGTGCTCGTGGACAGGAAGCCAGTGGTGTGGGGATGCCCTCGGGAGACTGCAGGG  
AGCTCCTGGACACCAGCTGAGCGTCCAGTCCCCACAGCCACATGAGTGAATGGAGCCTGCGGAGCGGGA  
AGGCTGGGCTCCCAACCCGCCAGATTCTACAAGCACTTCACACCTCGATATAAGACCTCACCACGGT  
TAAGAGTGTCTACTTCCCTCCATTGGCAGGGAGCGGCTGCGACTGAAGGCCATTGTGGGCTACAATGGG  
AATGGGCGGGCAACATGGTCTGGAGGCCGACACAGGCTTCTTTCGCTACACTTGTGGTCCGCTGGTGG  
TAGTGGAGGACCTGCATCTGGCACCAGAGGCACTGGCTTGGCCATTCTCAGGAGATCTCTACTCTGGC  
ACTAACCCAGGATGGCCAGATCTGGCCTCTGCTCCTGCTGCGGCAACACAGCTGCCGCTTGGCCAGATC  
GAAATTTGGGATGTTCCAAAGGCTTTGTGCGCACCTCCTTTCCCATGACACAGCTGTGAGGCTCTG  
TGGCTTTCTCACCAGATGATGAGTTCCTTGAACGCTGGGGACTATGCTGACAGGAACCTTGGCCTGTG  
GAGCATGGCCACCTATGAACCTCTGTGATCCACTCGCCTCCTGGAGCCTGTGCATGGTGTGGCCTTAA  
CCATGGGATGCCAATGAGCTCATCTGTGTGGCACAATGCCATCACCTTCTGGCTCCTGCAGCATCATG  
GGGACAGACCTGCTTCCAGGTACACCGGGAACCAATCCCCGAGGAACTGGGGGCGTCCGAGTTGACCTC  
ACTCTGCTATGGGGCCAGCCCTCTGCTCTACTGCGGCTCCAGCTCTGGCCAGGTCTGTGTCTGGGACACT  
GGCACTGGCCACTGCTTCTGGCCTGGGAGGCTGACGATGGGGAGATCGGGGTGCTGCTGTGTTCAAGCT  
CTAGACTGATCAGTGGGAGCAACACAAAAGGCTGCGCCTTGGGCTGTGGGGTTGTGCCAGAGCTAAG  
GCGCAAAGGCTCCAGTGCCAGATCCAGTCTGTTTTCATGGAGCGTGAAGTACCCCTGGATGGGGCTGTT  
GTGAGTGCCAGTTTTGACAGTGGCATGGACATGGGTGTAGTGGTACCACAGCTGGCACCATCTGGTACA  
TCAGCTGGACAGAGGCACTAGCACCCGCTCATCAGTGGCCACAGGACCAAGGTAACGAGGTGGTCTT  
CAGCCCGGTGAGTCTCACTGTCCACCTGTGGTGGGATGGGAGCGTGGGGTGGTCTTTGGCCAGC  
ATGGAGCTGGTGTCCAGTTTCAGGTGCTGAACAGAGCTGTCTCTGCCTTGCCTGGACGCCCCCGTCT  
GTGAACTCCAGAGCAGCAGCAGGTGGTGGCCGGCTACAGCGATGGCACACTTCGAGTCTTCAAGTATCTC  
TCGTACAGCAATGGAATCAAGATGCACCCCAACCGGACCGCTCTGACAGCCATCGCCTTCTCCACCGAC  
GGTCAAGCATCTATCTGGAGATAAGGACGACTTGTGGCTATAAGCCACCCCTGCACAGGAATGACCT  
TCCGTGTGCTCAGTGACCACCGGGGTGCTCAATTTCTGCTATCCAGAGCACGAAAGAAATATGGAGA  
CCTAGGGGTAGAGGTGTAGAATGTGGCTGGTGAAGTGGGGACCAACGTGTGAGCATCTGGGCTCTC  
GACTGGCTCCGGGACCGCTGTGAACCTCTGGAATGGTTGAGCTTCTGCACTGCTGTCTCAGAGGCTC  
CAGGCTCCTGCCCTCTCTTGTGCTTCTGCCCCTGGGATAAGGCGATACTGGTGTGTGGGCTC  
GGGTGCATGAGGAGTCTCTTCTACAGCCTCCGTGAGAAGCAGGTGATACAGAAGCACCTCTGCC

TTCTTTGCCATGTCTTTGAGCCTGTCCCCAGGATCTCAGCTCATGGTGGTTGGTTTTGCTGAGTGCATGA  
 TGAGGCTCCTAGACTGTGCGTCAGGACTGCCAGGACTTGAAGGCCATGATGACTCGGTCCACCTGTG  
 TAGGTTCACTCCATCTGGCAGACTGCTTTCACAGCTGCTCACACGAGATCCTGGTGTGGGAAGTCACC  
 GATCCC

ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG216946 representing NM\_001163766  
 Red=Cloning site Green=Tags(s)

MAGGSGARETRCRQGSRPGSPGSEVPAASVTGPRAEARPAGGGGSRRAAPDRCSGGVPSAAWQHPFLNV  
 FRHFRVDEWKRSSKEGDVAVVTDKVLKSAVYRIRGSVSASNYIQLPRTSTQSLGLTGRYLYLFRPVPTK  
 HFVIHLDVSTEDGQVIRVSFNLKFEKFSSTWLQFPFVFETKTPRRGGDIWSKRDGLNEGLKRDDLAVG  
 ALPRARWTCQLDLRDILMFYLGRHYSHLKSIRLCASLLVRNLVYSDLCFDPAVTVTEARRAKLSVNPMP  
 REMAFVPVKGESWHDNYIHVRFPSDCSKVPDEQDEKSCSPPEAVFLGRMSRHLPHPGVLGKPLLSSKSPV  
 AQACSSALPCQVLSASSRLPEVSRTRYREVSVSASSIQSQRPSVRDEVPDAHTVSGERHVLADRSSGV  
 PMALEDIGSCLFLPDPVLRKGVIGFGHSTQWALWTKDGVAVVYPCHAVIIVLQIDTGGQRFFLGHTD  
 KVSALALNGSDTLASAQVQPPSMVRLWDFQTGSCSLFRSPLHTICLSFSGSGALLCGVGKDRHGRTV  
 VVAWSTEQAGLGGVVVLAKVHTDFDIRAFQVAFFDETRMASCGRGSVRLWLRGGVLRSCAVDLGEYCS  
 LELTDLAFAQALDGHCAPSAGTLFVCSHSGHILEIDHQMSVQHVRRLLPARSPGAPLAEKQNFVSVGSGI  
 AITSSLVSTATCAVGESEGYLRWLDFSSVLEAEHDPVSSVSFSPDGLRVLSTTSGHLGFLDVPSR  
 EYTVLARSHMAPVLALSTEPNRRQMATVSLDHTVRIWDLATLQQLYDFSSSEDTPCAVAFHPTMPNFFCG  
 FSSGAVRSFSLESSGVLVEHTRHRGATISLVITLDGRFLFSSCSQGSVQYSCADSQCCLRVAANMVCQ  
 DGRPNPNILAVSGDSCRLAFVGPSCMVTIVESASLDELRLVDVSTLNLASNHLDWAVAICFSPGNSHL  
 LVSTSSNKVVVLDVAVSGHTLRELSVRSRACCSLASEDAHLLAATDRTITVWDYPTQANPSCQVYIGH  
 SEPVHAVAFTPDQLQVISVGDAIFLWDILATPERDGGDHEAPPGEAGSSSQQLDDLASGASGLPRQQVP  
 IPFQALPPPLSSHDRLLDGSTGTFSTDEEGLCEENHVSEALLQGQAPTPHVLVDREASGAGDAPRETAG  
 SSWTPAERPSPHSHMSEWSLRSGKAGLPTRPDSYKHFTPRYKTSRPRVKSVPYFPPIGRERLRLKAIVGYNG  
 NGRANMVMWRPDTGFFAYTCGRLLVVVEDLHSGTQRHHLGHSQEISTLALNQDQILASASCCGNTAARCI  
 RIWDVPKGLCRHLLSHHDTAVQALAFSPDDEFVTLGDYADRNLALWSMATYELLSTRLLLEPVHGVAFN  
 PWDANELICVGTNAITFWLLQHHGADTCFQVHREPIPEELGASELTSLCYGASPLL YCGSSSGQVCVWDT  
 GTGHCFLAWEADDGEIGVLLCSGSRLISGSNTKRLRLWAVGVVPELRRKGSSARSSSVFMERELTLDGAV  
 VSASFDSGMDMGVGTAGTIWYISWTEGTSTRLISGHRTKVNEVVVSPGESHCATCGEDGSVRVWVSLAS  
 MELVIQFQVLNQSCLLAWTPPSCLEPQQQVVAGYSDGTLRVFISIRTAMELKMHPHRTALTAIAFSTD  
 GQTILSGDKDGLVAISHPCTGMTFRVLSDHRGAPISAIQSTSKEYGDLGVEGVELWLAASGDQQRVSIWVS  
 DWLRDRCELLEWLSFPAPAVSEAPGLLPPSLAAFPCWDKAILVCVGLGAHEEVIFYSLRQKQVIQKTPLP  
 FFAMSLSLSPGSQLMVVGAECMMRLLDACSGTAQDLEGHDDSVHLCRFPTSGRLLFTAAHNEILVWEVT  
 DP

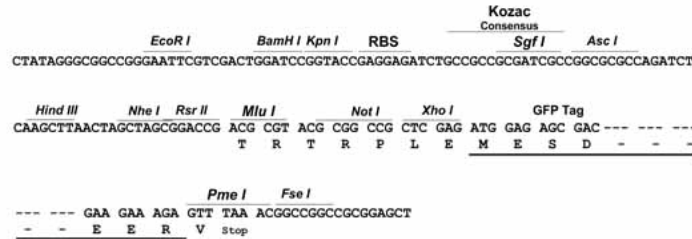
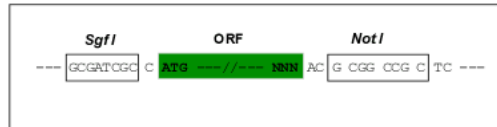
TRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-NotI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM\_001163766

ORF Size: 5676 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\\_001163766.1](#), [NP\\_001157238.1](#)

**RefSeq Size:** 6068 bp

**RefSeq ORF:** 5679 bp

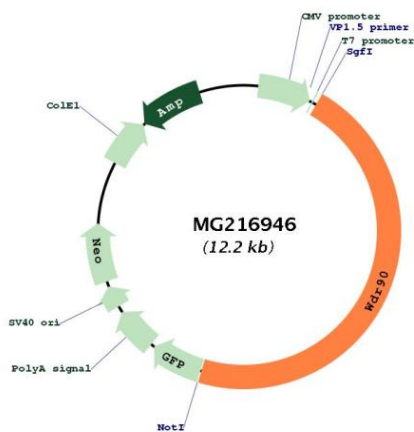
**Locus ID:** 106618

**UniProt ID:** [Q6ZPG2](#)

**Cytogenetics:** 17 A3.3

**Gene Summary:** Required for efficient primary cilium formation.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG216946