

Product datasheet for **RR210806**

Wdr1 (NM_001014135) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wdr1 (NM_001014135) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wdr1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR210806 representing NM_001014135
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCGTACGAGATCAAGAAGGTGTTCCGACGCTCCCCAGGTGGAGCGGGGTGTCTCTAAGATCCTCG
 GCGGAGACCCCAAGGGCGATAATTTCTCTACACCAATGGCAAGTGCCTCATCCTGAGGAACATCGACAA
 CCCTGCTGTTGCTGACATCTACACAGAACAGCCCATCAGGTGGTAGTAGCCAAGTATGCACCCAGCGGA
 TTCTACATTGCTTCTGGAGATATCTCTGGGAAGCTAAGGATCTGGGATACCACACAGAAGGAGCACATTC
 TAAAGTATGAGTACCAGCCTTTCGCTGGGAAGATCAAGGACATAGCCTGGACCGAAGACAGTAAGAGGAT
 CGCCGTGGTGGGGAAGGAAGGGAGAAAATTTGGAGCTGTCTTCTTATGGGACACTGGCTCTTCTGTGGT
 GAGATCACAGGACACAACAAAGTCATTAACAGCGTGGACATCAAGCAGAACAGGCCCTACCGACTAGCAA
 CAGGGAGTGACGATAACTGTGCTGCATTCTCGAGGGCCCCCATCAAGTTCAAGTTTACAATTGGTGA
 CCACAGCCGCTTGTCAACTGTGTGCGATTCTCTCCTGATGGGAACAGATTTGCCACAGCTAGTGCTGAT
 GGCCAGATTTTCATTTATGATGGGAAGACAGGAGAAAAGGTGTGTGCCCTTGGAGGAAGCAAGGCTCATG
 ATGGAGGAATTTATGCCATTAGTTGGAGTCTGTATAGCACCCATTTGCTATCTGCCTCTGGAGACAAAAC
 CTCTAAGATTTGGGATGTCAATGTAACACTCTGTGGTCCAGCAGTTTCCCATGGGCTCCAATGTTCTGGAC
 CAGCAGCTGGGCTGCCTCTGGCAGAAGGACCACCTCCTTAGCATCTCCCTGTCTGGATACATCAACTACC
 TGGACAAAAATAACCCAGCAAGCCCTCCGGGTATCAAGGGTACAGTAAATCCATCCAGTGTCTGAC
 AGTGCACAAAAATGGTGGCAATCTACATCTATTCTGGGAGCCATGATGGCCATATTAATTACTGGGAT
 TCAGAGACAGGAGAGAATGACTCCTTCTCTGAAAAGGCCACAAAAATCAGGTGCCAGGATGACTGTGG
 ACGAGTCTGGGCAGTTGGTCAGCTGCAGCATGGACGACACAGTCCGGTATACTAACCTCACACTGAGGGA
 CTACAGTGGACAAGGCGTTGTGAAACTGGATGTTAGCCAAAGTGTGTAGCTGTTGGCCCTGGGGGATAT
 ACCGTGGTCTGTGCATTGGACAGATTGCTTCTGAAGGACCAGAAGAAATGCTTCAGCATCGACAACC
 CTGGCTACGAGCCTGAAGTTGTTGCTGTGCACCCTGGTGGGACACAGTACTGTTGGTGGCTCGGATGG
 CAATGTGCGTGTACTCCATCTGGGTGCCACACTAAAGGATGAAGGCAAACTCCTAGAGGCCAAGGGG
 CCAGTGACAGACTTGGCCTACTCTCATGACGGTGCCTTCTGGCTGTGTGTGATGCCAGCAAGGTGGTCA
 CAGTGTTCAGTGTAGCTGATGGCTATTCGGAGAATAATGTTTTTATGGACACCATGCAAAAATTGTGTG
 CCTGGCCTGGTACCAGATAATGAACACTTTCCTCTGGCGGCATGGACATGATGGTATATGTGTGGACA
 CTGAGTGACCCAGAGACCAAGTCAAGATCAAGATGCCACCGCTGCACCACGTGACAGTCTGGCCT
 GGCTGGACGAACACACTGGTACCACCTCCCATGACGCTCTGTGAAGGAGTGGACAATCACCTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR210806 representing NM_001014135
 Red=Cloning site Green=Tags(s)

MPYEIKKVFASLPQVERGVSKILGGDPKGNFLYTNKCVILRNIDNPVAVADIYTEHAHQVVVAKYAPSG
 FYIASGDISGKLRIWDTTQKEHILKYEYQPFAGKIKDIAWTEDESKRIAVVGEGRKFGAVFLWDTGSSVG
 EITGHNKVINSVDIKQNRPYRLATGSDDNCAAFFEGPPFKFKFTIGDHSRNVNCFVSPDGNRFATASAD
 GQIFIYDGTGKVCALGGSKAHDGGIYAISSPDSHLLSASGDKTSKIWDVNVNSVVSSTFPMGNSVLD
 QQLGCLWQKDHLLSISLSGYINYLDKNNSKPLRVIKGHSKSIQCLTVHKNGGKSYIYSGSHDGHINYWD
 SETGENDSFSGKHTNQVSRMTVDESGQLVSCSMDDTVRYTNLTLRDYSGQGVVCLDVQPKCVAVGPGGY
 TVVVCIGQIVLLKDQKKCFIDNPGYEPEVVAVHPGGDTVAVGSDGNVRYVYILGATLKDEGLLEAKG
 PVTDLAYSHDGAFLAVCDASKVVTVFSVADGYSENNVYFGHHAKIVCLAWSPDNEHFASGGMDMMVYVWT
 LSDPETKVKIQDAHRLHHVSSLAWLDEHTLVTTSHDASVKEWITY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

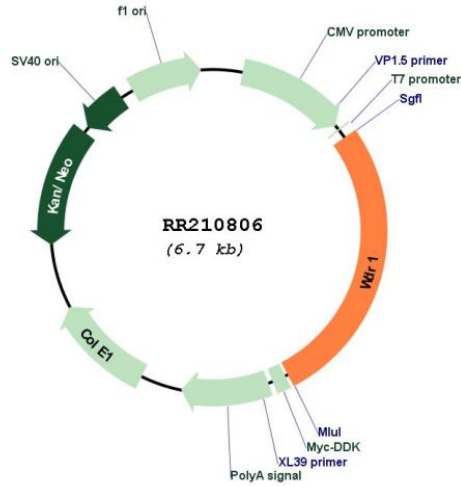
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:

NM_001014135

ORF Size:	1818 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:	<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_001014135.1 , NP_001014157.1
RefSeq Size:	2844 bp
RefSeq ORF:	1821 bp
Locus ID:	360950
UniProt ID:	Q5RKI0
Cytogenetics:	14q21
MW:	66.2 kDa
Gene Summary:	Induces disassembly of actin filaments in conjunction with ADF/cofilin family proteins. Enhances cofilin-mediated actin severing. Involved in cytokinesis. Involved in chemotactic cell migration by restricting lamellipodial membrane protrusions. Involved in myocardium sarcomere organization. Required for cardiomyocyte growth and maintenance. Involved in megakaryocyte maturation and platelet shedding. Required for the establishment of planar cell polarity (PCP) during follicular epithelium development and for cell shape changes during PCP; the function seems to implicate cooperation with CFL1 and/or DSTN/ADF. Involved in the generation/maintenance of cortical tension. Involved in assembly and maintenance of epithelial apical cell junctions and plays a role in the organization of the perijunctional actomyosin belt (By similarity).[UniProtKB/Swiss-Prot Function]