

Product datasheet for MC226917

Wdr61 (NM_023191) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Wdr61 (NM_023191) Mouse Untagged Clone

Tag: Tag Free Symbol: Wdr61

Synonyms: 2700038L12Rik; 2810418I05Rik; REC14

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >MC226917 representing NM_023191

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACCAACCAGTACAGTATTCTCTTCAAGCAAGAGCAAGCCCATGATGATGCCATATGGTCAGTTGCCT
GGGAGACAAACAAAAAGGAAAACATTGAAACAGTGGTCACAGGATCCCTGGATGACCTGGTGAAGGTCTG
GAAATGGCGTGATGAGAGGCTGGAGCTCCAGTGGAGCCTGGAGGGACATCAGCTCGGGGTGGTGTCTGTG
GACATCAGCCACACTCTTCCCATTGCTGCATCCAGCTCTCTAGACGCTCATATTCGCCTCTGGGACTTGG
AAAATGGCAAACAGATGAAGTCTATAGATGCAGGACCAGTGGATGCCTGGACTTTTGCCATTTTCTCCTGA
CTCCCAGTATCTGGCCACAGGAACTCACATGGGGAAAGTGAACATTTTTGGTGTGGAAAGTGGAAAAAA
GAATATTCTTTGGACACTAGAGGAAAATTCATCCTTAGTATTGCATATGCCTGATGGGAAAATACCTTGG
CCAGCGGAGCCATAGACGGAATCATCAATATTTTTGACATTGCAACTGGAAAGCTTTTTGCATACGCTGGA
AGGCCATGCGATGCCCATTCGCTCCTTGACCTTTTCCCCTGACTCCCAGCTCCTTGTCACGGCTTCAGAT
GATGGCTACATCAAGATCTATGATGTACAACATGCCAATTTTGCTCCAGTTCATCTGACAAAAAGTGTGAA
GGTTTGGAATGTTGCGTTCTGTCCTGATGACACTCACTTTTGCTCCAGGTTCATCTGACAAAAAGTGTGAA
GGTTTGGGATGTTGGAACAAGGACCTGTATTCACACCTTCTTTTGATCACCAGGATCAGGTTTTGGGGAGTA
AAAATAAATGGAAAATGGATCAAAAAATTGTATCTGTTTGGAGAGATGACCAGGAAATTCATGTCTATGACTGCC

CAATTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul **ACCN:** NM 023191



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918 bp

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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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: <u>NM 023191.3</u>, <u>NP 075680.1</u>

RefSeq Size: 1225 bp
RefSeq ORF: 918 bp
Locus ID: 66317
UniProt ID: Q9ERF3

Cytogenetics: 9 A5.3



Gene Summary:

Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser-5'-phosphorylated forms and is involved in transcriptional elongation, acting both indepentently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcription of Hox and Wnt target genes. PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1. PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1); UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. Required for mono- and trimethylation on histone H3 'Lys-4' (H3K4me3), dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription. Component of the SKI complex which is thought to be involved in exosomemediated RNA decay and associates with transcriptionally active genes in a manner dependent on PAF1C (By similarity).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 encode the same protein (isoform a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.