

## **Product datasheet for MC202099**

## Wdr61 (NM\_001025375) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Wdr61 (NM\_001025375) Mouse Untagged Clone

Tag: Tag Free Symbol: Wdr61

**Synonyms:** 2700038L12Rik; 2810418I05Rik; REC14

**Mammalian Cell** 

Selection:

Neomycin

Vector: PCMV6-Kan/Neo (PCMV6KN)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC023026 sequence for NM\_001025375

GTACAGTATTCTCTTCAAGCAAGAGCAAGCCCATGATGATGCCATATGGTCAGTTGCCTGGGAGACAAAC AAAAAGGAAAACATTGAAACAGTGGTCACAGGATCCCTGGATGACCTGGTGAAGGTCTGGAAATGGCGTG ATGAGAGGCTGGAGCTCCAGTGGAGCCTGGAGGGACATCAGCTCGGGGTGTGTCTGTGGACATCAGCCA CACTCTTCCCATTGCTGCATCCAGCTCTCTAGACGCTCATATTCGCCTCTGGGACTTGGAAAATGGCAAA CAGATGAAGTCTATAGATGCAGGACCAGTGGATGCCTGGACTTTGGCATTTTCTCCTGACTCCCAGTATC GGACACTAGAGGAAAATTCATCCTTAGTATTGCATATAGTCCTGATGGGAAATACCTGGCCAGCGGAGCC ATAGACGGAATCATCAATATTTTTGACATTGCAACTGGAAAGCTTTTGCATACGCTGGAAGGCCATGCGA TGCCCATTCGCTCCTTGACCTTTTCCCCTGACTCCCAGCTCCTTGTCACGGCTTCAGATGATGGCTACAT CAAGATCTATGATGTACAACATGCCAATTTGGCTGGCACACTGAGTGGCCATGCGTCCTGGGTGTTGAAT GTTGCGTTCTGTCCTGATGACACTCACTTTGTCTCCAGTTCATCTGACAAAAGTGTGAAAGGTTTGGGATG TTGGAACAAGGACCTGTATTCACACCTTCTTTGATCACCAGGATCAGGTTTGGGGAGTAAAATATAATGG AAATGGATCAAAAATTGTATCTGTTGGAGATGACCAGGAAATTCATGTCTATGACTGCCCAATTTAAACA CCAGCATCCTCGGGGCTAGGGCCTCAGACTACACAGGGTTGATCATGACATTCCTCAGATTTTTTGGCAT ACTTAAAGTACAGCATATATTGTAGAACTTTTGTAGATACAATATAAATTTTTCCTGTTTTATTGGAAAT 

Restriction Sites: Rsrll-Notl

**ACCN:** NM\_001025375

**Insert Size:** 918 bp



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com ORÏGENE

**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).

**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.

Q9ERF3

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>BC023026</u>, <u>AAH23026</u>

RefSeq Size:1174 bpRefSeq ORF:918 bp

**Locus ID:** 66317

Cytogenetics: 9 A5.3

**UniProt ID:** 



## **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 (1) represents the longest transcript and encodes the longer protein (isoform a). Variants 1 and 2 encode the same protein.