

## Product datasheet for MR206503

### Wdr4 (BC039272) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Wdr4 (BC039272) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wdr4
Synonyms:	AI415180; AI448349; D530049K22Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206503 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGAGCTCTGCGGGGCTGGCACTGTGCGCCCAGACGCTGGTGGTGCGAGGAGGCAGCCGGTTCCTAG  
CCTTCTCCACTACGGGCAGTGATGACTGTGTCTTACATACGACTGCAGTACTGCAGAGAAGAAGGC  
CACGCCAGAAGATAAAGGGGAGGACGGACAGCCCGCAGACACAGGGAGTGACTCGATTCTGGCGTCCACC  
TTCTCAAAGTCTGGCCGCTATTTTGTCTTAACAGATGACAGTAAGCGTCTGATTCTTTCCGTACAAAAC  
CATGGCAATGTCTGAGTGTGAGGATGGTGGTGCGGAGGTGCACCGCCCTGACCTTACAGCCTCAGAGGA  
CCGAGTCTTGGTGGCTGACAAGTCTGGAGACGCTACTCCTTTTCGGTGTCTGGAGCCAGATGGATGTGGC  
AGGCTGGAGCTTGGGCACCTCTCCATGTGCTAGACGTGGCTGTGAGTCTGATGACCAGTTTGTGCTTA  
CTGCAGACCGGGATGAGAAGATCCGGGTGAGTGGGCTGCTGCCCGCATAGCATCGAGTCTTTCTGCTT  
GGGACACACTGAGTTTGTGAGCCGATCCTTGTAGTGCCAGTCACTGAACTGCTGCTTTCTTCTCT  
GGGGATGGCACCTGAGACTCTGGGAGTACAGAAGCGGTAGGCAGCTGCAGTGTGTGACCTGGCCGGCC  
TACAGGAGCCTGGAGAGCAGCCAGGCCACAAGGGGTTGGCCGCTCCAGGATTGCATTCTGGGGACAGGA  
GAGCTATGTGGTCTTCTGTGTGAGTGCCTTCCCGTGGTCTTCTGCTTCCAGCTTGTGTTGAGGAGCCCGGG  
GGCTGTGGGTTCTACAGGACTGCCGTGATGCCCCCTGGTGTCTGGAGGCCTGTGGGTGGTGTGAGTGGCA  
GGCTGCTCCAGACGGTGTGTGCTCCCGAGACTCTGCAGCCATCTCCGTGAGAGCTGGGCCATGTGGAA  
GGTTCTGTTGGTACAGATGACAGCTTCCGAGCCTGTACAAGGCCACCTTTGACAACATGACCTCTTACC  
TGAAGAAAAGGAAGAGAGACTGCAGCAGCAGCTGAAGAAGAAGCGGCAAGGAGCCCTTCCAGGGTCT  
CCCGAACAGACAAAAGGCGTGCCCGGGCCAGTCAGCCCTTAGTTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR206503 protein sequence  
Red=Cloning site Green=Tags(s)

MASSAGLALCAQTLVVRGGSRFLAFSTTGSDDDCVFTYDCSTAEKKATPEDKGEDGQPADTGSDSLAST  
 FSKSGRYFALTDDSKRLILFRTPWQCLSVRMVRRCTALTFTASEDRVLVADKSGDVYSFVLEPDGCG  
 RLELGHLSMLLDVAVSPDDQFVLTADRDEKIRVSWAAAPHISIEFCLGHTEFVSRILVVPSPHELLLSSS  
 GDGTLRLWEYRSGRQLQCCDLAGLQEPGEQPGHKGLAASRIAFWQESYVVLLCECPVVFVFLDASRQ  
 QLVFRQLTFPHRVWDVVFEARGLWVLQDCRDAPLVLWRPVGGEWQAAPDGAIVSPRLCSHLRESWAMLE  
 GSVGTDDSFRLYKATFDNMTSYLKKKEERLQQQLKKKRQSPFPGSPEQTKKACPGQSALSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** BC039272

**ORF Size:** 1239 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.

**RefSeq:** [BC039272](#), [AAH39272](#)

**RefSeq Size:** 2054 bp

**RefSeq ORF:** 1241 bp

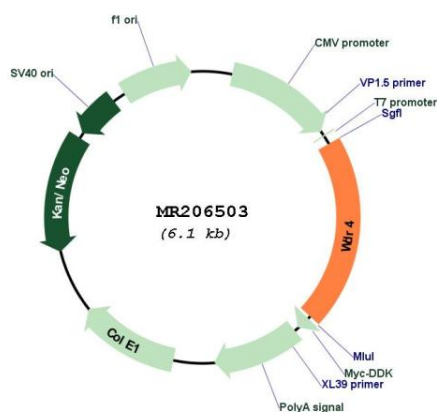
**Locus ID:** 57773

**Cytogenetics:** 17 B1

**MW:** 45.8 kDa

**Gene Summary:** Non-catalytic component of a methyltransferase complex required for the formation of N(7)-methylguanine in a subset of RNA species, such as tRNAs, mRNAs and microRNAs (miRNAs) (PubMed:29983320). In the methyltransferase complex, it is required to stabilize and induce conformational changes of the catalytic subunit (By similarity). Required for the formation of N(7)-methylguanine at position 46 (m7G46) in tRNA (PubMed:29983320). Also required for the formation of N(7)-methylguanine at internal sites in a subset of mRNAs (By similarity). Also required for methylation of a specific subset of miRNAs, such as let-7 (By similarity). Acts as a regulator of embryonic stem cell self-renewal and differentiation (PubMed:29983320). Independently of METTL1, also plays a role in genome stability: localizes at the DNA replication site and regulates endonucleolytic activities of FEN1 (PubMed:29574139). [UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR206503