

Product datasheet for **MR230641**

Wac (NM_001282093) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wac (NM_001282093) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wac
Synonyms:	1110067P07Rik; A230035H12Rik; AI256735; AI256776; Wwp4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR230641 representing NM_001282093
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGAGACGCCGAGATCCTTACCACCAACAAAATGTTGCGGAGATCTAATAGTCTGAAAACAAAT
 ACAGTGACAGCACAGGTACAACAAGGCCAAAAACGTGCACACTCAGAGAGTTAGAGAAAAGGACGGTGG
 GACCAGTTACTCTCCACAAGAAAACCTACACAACCACAGTGCACCTTCATAGTTCAAATTCACATTCTTCT
 AATCCAAGCAATAATCCAAGCAAAAACCTCAGATGCACCTTATGATTCTGCAGATGATTGGTCTGAGCACA
 TTAGCTCATCTGAAAAAAGTACTACTACAATTGTGCGACAGAAGTTTACAGTGGGAGAAAACAAAAGA
 GTGGCTTGAAAGAGAACAGAGACAAAAGAAGCAATAAGCTGGCAGTTAATAGTTTCCAAAAGACAGG
 GATTACAGAAGAGAGGTGATGCAAGCAACAGCCACTAGTGGTTCACCAGTGAATGGAAGACAAGCATT
 CCAGCGATGCCAGTAGTTTGTCCCACAGAATATTTTGTCTCAAACAAGCAGACACAATGACAAAGACTA
 CAGACTGCCAAGAGCAGAGACTCACAGTAGCTCTACGCCAGTACAGCACCCCATCAAACAGTGGTTCAT
 CCAACCGTACCCCAAGCACTGTTCTTCTAGTCCATTTACGCTTCAGTCTGATCACCAGCCAAAGAAAT
 CATTTGATGCTAATGGAGCATCTACTTTATCAAACCTGCCTACACCCACAGCTTCTCTCCCTGCACAGAA
 AACAGAGAGAAAAGAAATCTGCTCCAGGAGACAAATCAATATCACATTCTTGCACTCCTTCCACATCT
 TCAGCCTCTGGCCTGAACCCTACATCTGCGCCTCCGACATCTGCTTCAGCAGTACCTGTTTCTCCCGTTC
 CACAATCAACAATACCTCCATTACTTCAGGACCCAAATCTTTTTAGACAGTTGCTTCTGCTTTGCAAGC
 CACGCTACAGCTTAATAATTCTAATGTGGACATATCCAAAATAAATGAAGTCTTACAGCAGCTGTAAACA
 CAAGTTCCTGCAGTCTATCATCCACAAGTTTCTTACTGCTGGACCATCTGCTTCAACATCACCTCAC
 TGATTTCTCAAGCTGCCAGCTTCTACACAAGCCAGCCATTAATCAGTCTCCAATGTCTGTGACATC
 TGATGCTTCATCCCAAGATCCTATGTGTCTCCAAGAATAAGCACACCTCAAACATAACAGTCCCTATG
 AAACCTTTGATTAGTACTCCACCTGTTTCATCCCAGCCAAAGGTTAGTACTCCAGTAGTTAAGCAAGGAC
 CAGTGTACATTCGGCTACACAGCAGCCTGTAACCTGCTGACAAGCAGCAGAGCCATGATCTGTTTCTCC
 TCGAAGTCTTCAGCGCTTAAGTAGCCAGAGAAGTCCATCACCTGGTCCAATCATACTTGTAGTAGTAAT
 GCATCAACTGCAACTGTTGTACCACAGAATGCATCTGCTAGACCTGCGTGTCTTAACACCTACTCTAG
 CAGCGCACTTCAATGATAATCTCATAAAGCATGTTCAAGGGTGGCCTGCAGACCACGCAGAGAAACAGGC
 ATCAAGATTGCGTGAAGAAGCCATAATATGGGAAGTGTACATATGTCAGAAATATGACTGAGTAAAA
 AATTTGAGATCATTAGTTCGAGTATGTGAAATTAAGCAACTTTGCGAGAGCAGAGGATACTATTTTGA
 GACAACAAATTAAGGAACTCGAAAAGCTGAAAATCAGAATTCCTTCATGGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230641 representing NM_001282093
 Red=Cloning site Green=Tags(s)

MRDAADSPPNKMLRRSNSPENKYSdstGHnkAKNVHTQVRERDGGTSYSPQENSHNHSALHSSNSHSS
 NPSNNPSKTSdAPYDSADDWSEHISSSGKYYNCRTEVSQWEKPKEWLEREQRQKEANKLAVNSFPKDR
 DYRREVMQATATSGFTSGMEDKHSSDASSLLPQNILSQTsrhndkdyrlPRAETHSSSTPVQHPiKPVVH
 PTATPSTVPSSPFTLQSDHQPKKsFDANGASTLSKLPTPTASLPAQKTERKESAPGDKSISHSCTTPSTS
 SASGLNPTSAPPTSASAVPVSPVQSTIPPLLQDPNLFRLPALQATLQLNNSNVDISKINEVLTAAVT
 QASLQSIHkFLTAGPSAFNITSLISQAAQLSTQAQPSNQSPMSLTSDASSPRSYVSPRISTPQTNTVPM
 KPLISTPPVSSQPKVSTPVVKQGPVSHSATQQPVTADKQQSHDPVSPRSLQRLSSQRSPSPGNHTCSSN
 ASTATVVPQNASARPACSLTPTLAAHFNDNLIKHVQGWpADHAEQASRLREEAHNMGSVHMSEICTELK
 NLRSLVrvceIQATLREQRILFLRQqIKELEKLNQNSFMV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001282093

ORF Size: 1803 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: [NM_001282093.1](#), [NP_001269022.1](#)

RefSeq Size: 5058 bp

RefSeq ORF: 1806 bp

Locus ID: 225131

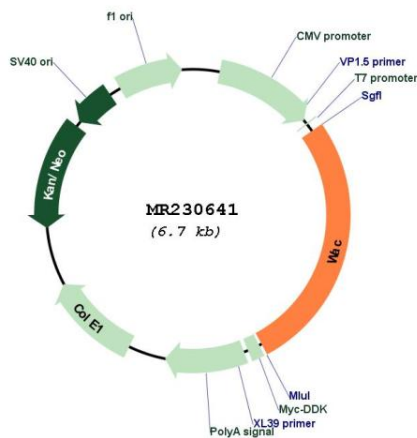
UniProt ID: [Q924H7](#)

Cytogenetics: 18 A1

MW: 65.9 kDa

Gene Summary: Acts as a linker between gene transcription and histone H2B monoubiquitination at 'Lys-120' (H2BK120ub1). Interacts with the RNA polymerase II transcriptional machinery via its WW domain and with RNF20-RNF40 via its coiled coil region, thereby linking and regulating H2BK120ub1 and gene transcription. Regulates the cell-cycle checkpoint activation in response to DNA damage. Positive regulator of amino acid starvation-induced autophagy. Also acts as a negative regulator of basal autophagy. Positively regulates MTOR activity by promoting, in an energy-dependent manner, the assembly of the TTT complex composed of TELO2, TTI1 and TTI2 and the RUVBL complex composed of RUVBL1 and RUVBL2 into the TTT-RUVBL complex. This leads to the dimerization of the mTORC1 complex and its subsequent activation. May negatively regulate the ubiquitin proteasome pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230641