

Product datasheet for **MR208531**

Wrap53 (NM_144824) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wrap53 (NM_144824) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wrap53
Synonyms:	BC021790; Wdr79
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR208531 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGACGTCGGAGGAGCGACTCTTAGCTCCGGATAGCCTCCCTCCTGACCTGGCCCCAGCTCCGGTAC
 CCCAAGGTTCCCCAGCGAGAAAAATACAGACTTTGAACCGGTGCCTCCGCCATGCGGTGGTGATGACCA
 ACCCCAGCTAGCCACAGATCCCCTGGCTAGCTTGGTTGTGCCAGGAGCTTCAACAAGGGGACTCTGTA
 CCTCTGGAAGTAGAATTTAATACTTCCAGTGAGTTGAGTCTGGAATCGAGGAGCAAGATGTTTCTGAAC
 ATGCGAGTCTCCCGGAGAAGAAACGAATCTCCCCGAGTTGGAGTCAGGAGAAGCCACGGAAGGTGTGTC
 TGAGGAACCGCTGAAGTGGATGAGGGGACACCTTTTGGACCTACAGCTTCTCGCAGGTACCCCGATAC
 CTCAGTGGTTCCTGGTCCGAGTTCAGCACCCGCTCCGAGAATCTTGAAGGTTGCAAGTGGGCCCTG
 ACGGTTCTGTATCTTGACCAATAGTGTGATAATGTCCTTCGGATTTACAACCTGCCCCAGAATTGTA
 CAGTGAACAAGAGCAGGTGGATTACGCCAAATGGTTCCTGTCTCGAATGGTGGAGGGCGACACCATC
 TATGATTACTGTGGTATTCTCTGATGTCTCCACCCAGCCAGACACCTCTATGTGGCCAGCAGCAGCC
 GGGAGAACCCGATTACATCTGGGATGCATTCACTGGAGAACTACGGGCTTCTTTCGCGCTTACACCA
 CCTGGATGAGTTGACAGCAGCCACTCGCTCTGTTTCTCCCCGGATGGTCCCAACTCTTCTGTGGCTTC
 AACCGACTGTGCGTGTCTTTCCACATCCAGGCTGGCAGAGACTGTGAGGTGCGAGCCACATTTGCCA
 AAAAGCAGGGCCAGAGCGGTATCATCTCTGTATAGCCTTCAGTCCATCCAGCCCTCTATGCCTGTGG
 CTCCTACGGCCGACCATAGGCCGTATGCCTGGGATGATGGTTCGCCTTTCCTTGTGGGAGGCCAC
 CAAGGGGTATCACCCACCTTTGCTTTCACCTGATGGCAATCTTCTTCTCGGGAGCCGAAAGGATG
 CTGAATCTGTGCTGGGATCTCCGGCAGCCAGGCCACCTCTGTGGTCTCTGAGTCGGGAAGTGACCAC
 TAATCAGCGCATCTACTTTGATCTGGACCCAGCGGTGAGTTCCTAGTGAGCGGCAACACCAGTGGAGTT
 GTCTCTGTGGGATATCAGTGGAGCTCTAGTGACGACAGCAAGCTGGAACCCGTGGTACTTTTCTGC
 CTCAGAAGGACTGCACCAACGGAGTCAGCCTTACCCTACCTTGCTCTACTGGCCACTGCTTCTGGCCA
 GCGCGTGTTCCTGAGCCACCAATAGCGGGGATGAAGGTGAGCTGGAGCTGGAGCTTCTCTGTCTCC
 CTGTGCCACGCCATCCCGAATGCAGCTTCAGCTCTGGTGGTGTGGAGGGGACCTGACCCAGTAGCC
 CTGTTGACGACCAGGATGAAAAGGGACAAAGAAGGACAGAGGCTGTGGGGATGAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

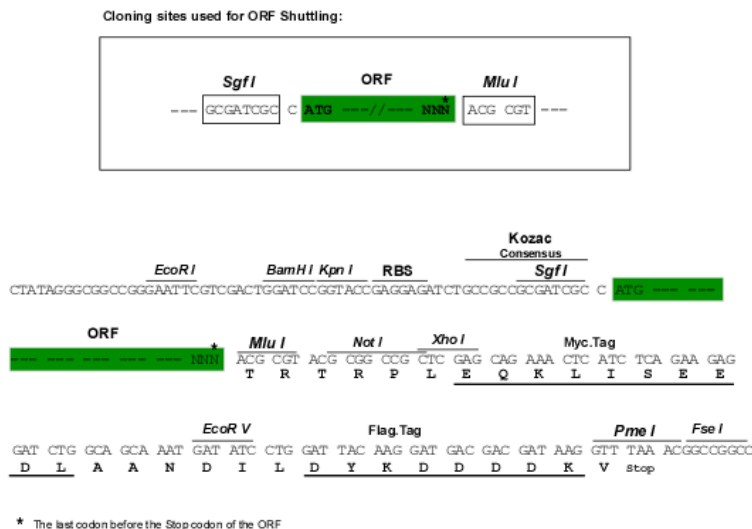
>MR208531 protein sequence
 Red=Cloning site Green=Tags(s)

MKTSEERLLAPDSLPPDLAPAPVPPQSPAENKNTDFEPVPPPCGGDDQPQLATDPVASLVVSQELQQGDSV
 PLEVEFNTSSELSPGIEEQDVSEHASLPEETNLPELESGEATEGVSEERAEVDEGDTFWTYSFSQVPRY
 LSGSWSEFSTRSENFLKGCKWAPDGCILTNSADNVLRIYNLPPELYSEQEQVDYAEMVPLRMVEGDTI
 YDYCWYSLMSSTQPDTSYVASSSRENPIHIWDAFTGELRASFRAYNHLDELTAHSLCFSPDGSQFLCGF
 NRTVRFVSTSRPGRDCEVRATFAKKQQSGIISCIASFSPQPLYACGSYGRITGLYAWDDGSPLALLGGH
 QGGITHLCFHPDGNLFFSGARKDAELLCWDLRQPGHLLWSLSREVTTNQRIFYDLDPSSGQFLVSGNTSGV
 VSWVDISGALSDDSKLEPVVTFLLPQKDCNGLVSLHPTLPLLATASGQRFPEPTNSGDEGELELELPLLS
 LCHAHPECQLQLWCGGGPDPSSPVDDQDEKQRRTEAVGMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_144824

ORF Size: 1599 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_144824.1](#)

RefSeq Size: 1896 bp

RefSeq ORF: 1599 bp

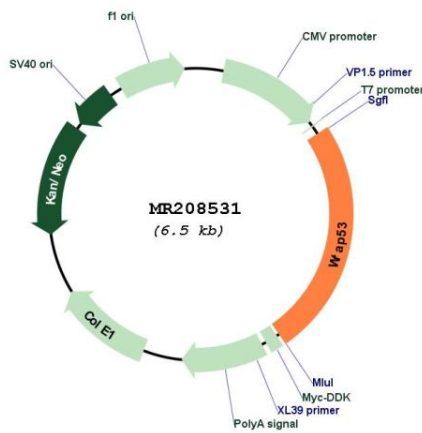
Locus ID: 216853

UniProt ID: [Q8VC51](#)

Cytogenetics: 11 B3
MW: 58.2 kDa
Gene Summary:

RNA chaperone that plays a key role in telomere maintenance and RNA localization to Cajal bodies (PubMed:29804836). Specifically recognizes and binds the Cajal body box (CAB box) present in both small Cajal body RNAs (scaRNAs) and telomerase RNA template component (TERC) (PubMed:29804836). Essential component of the telomerase holoenzyme complex, a ribonucleoprotein complex essential for the replication of chromosome termini that elongates telomeres in most eukaryotes (By similarity). In the telomerase holoenzyme complex, required to stimulate the catalytic activity of the complex (PubMed:29804836). Acts by specifically binding the CAB box of the TERC RNA and controlling the folding of the CR4/CR5 region of the TERC RNA, a critical step for telomerase activity (By similarity). In addition, also controls telomerase holoenzyme complex localization to Cajal body (By similarity). During S phase, required for delivery of TERC to telomeres during S phase and for telomerase activity (By similarity). In addition to its role in telomere maintenance, also required for Cajal body formation, probably by mediating localization of scaRNAs to Cajal bodies (By similarity). Also plays a role in DNA repair: phosphorylated by ATM in response to DNA damage and relocalizes to sites of DNA double-strand breaks to promote the repair of DNA double-strand breaks (By similarity). Acts by recruiting the ubiquitin ligase RNF8 to DNA breaks and promote both homologous recombination (HR) and non-homologous end joining (NHEJ) (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208531