

Product datasheet for **RR211362L4V**

Wrap53 (NM_001007610) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Wrap53 (NM_001007610) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Wrap53
Synonyms:	Wdr79
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001007610
ORF Size:	1596 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR211362).
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.
RefSeq:	NM_001007610.1 , NP_001007611.1
RefSeq Size:	1782 bp
RefSeq ORF:	1599 bp
Locus ID:	287432
UniProt ID:	Q5XII5
Cytogenetics:	10q24



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Gene Summary:

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