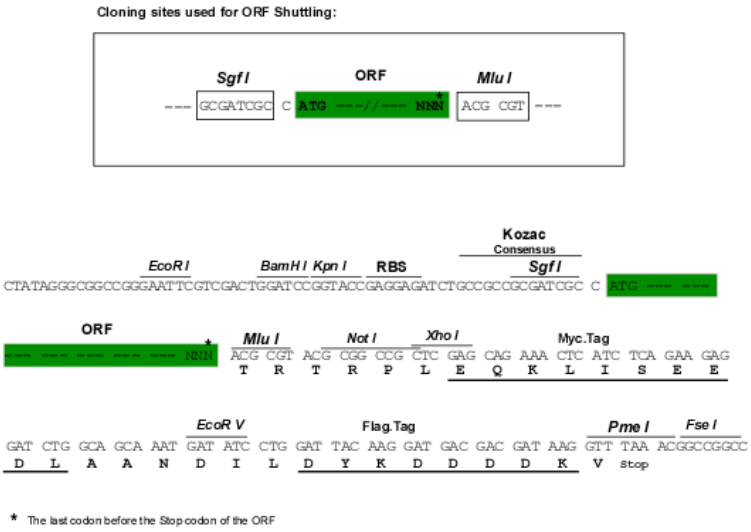
OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC231633

MRI (C7orf49) (NM_001243754) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	MRI
Synonyms:	C7orf49; MRI; MRI-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Restriction Sites:	SgfI-MluI
Cloning Scheme:	



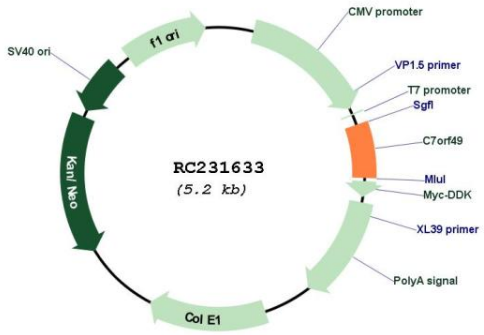
ACCN:	NM_001243754
ORF Size:	306 bp

View online »

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001243754.1, NP_001230683.1
RefSeq Size:	1452 bp
RefSeq ORF:	309 bp
Locus ID:	78996
UniProt ID:	Q9BWK5
Cytogenetics:	7q33
MW:	11.3 kDa

Gene Summary: Isoform 1: Cell-cycle-specific inhibitor of classical non-homologous end joining (NHEJ) of DNA double-strand break (DSB) repair during the S and G2 phases (PubMed:28959974). Acts as a regulator of DNA repair pathway choice by specifically inhibiting classical NHEJ during the S and G2 phases, thereby promoting error-free repair by homologous recombination during cell cycle phases when sister chromatids are present (PubMed:28959974). Preferentially protects single-stranded overhangs at break sites by inhibiting classical NHEJ, thereby creating a local environment that favors homologous recombination (PubMed:28959974). Acts via interaction with XRCC5/Ku80 and XRCC6/Ku70, interaction restricted during the S and G2 phases only (PubMed:28959974). Molecular mechanisms governing classical NHEJ inhibition via interaction with XRCC5/Ku80 and XRCC6/Ku70 are unknown (PubMed:28959974). May act as a regulator of proteasome (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC231633