

Product datasheet for SC322185

MRI (C7orf49) (NM_024033) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Tag: Tag Free

Symbol: MRI

Synonyms: C7orf49; MRI; MRI-2

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC (PS100020)

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for SC322185 CAGAGTTTGGGCGCCAGGCGAGACGGCAGGGCTTAAAGTTCCGGGAATCAAAGATCAACT
CCCACTGAGGACAAATGGACCTGTAATTCGGGTGTGACGAGAGAACGAGATTTACCTTC
CTGAATTAAAAACAGGTCATTAAGCTTGGGCCCTGACTTTTCTTTGTGAGAAGGTACAG
AGATGGAACCTTACAATCCGAGACTAAAACGAGGGTCTTCCCTCATGGCTGACAGCCC
AGGTGGCTACAAAGAATGTGGACCAATGAAGGCCCAAGAGGATGAGAATGGCAGCAG
TGCCAGTGGCAGCAGCAAGACTCCCTGCGACAAGGACTGTGTACTGCATGAATGAGGCTG
AGATAGTTGATGTTGCTCTGGGAATCCTGATTGAGAGCCGCAACAGGAAAAGGCTGCG
AGCAGCCGGCCCTGGCGGGGGCTGATAACCCAGAGCACTCCCTCCCTGCTCCGTGTGCGC
CTCACACAAGTTCTGGGAGCAGCAGTGAGGAAGAGGACAGTGGGAAACAGGCACTGGCTC
CAGGCCTCAGCCCTTCCAGAGGCCGGGGGTTCCAGCTCTGCCTGTAGCAGGAGCCCTG
AGGAGGAGGAGGAAGAGGATGTGCTGAAATACGTCCGGGAGATCTTTTTCAGCTAGGGCA
TAAACTGTGCACTGAACTGTCTGCCGAGAGCAGCTGGAGGACAGCTGAGCTTCACTGGT
GCTGCTGGGCGCCCGCTGTGGGAATGGGGCTCTCTGTGCTCCTACCTTTGTGCTTCT
TGGGCTGGCAGATTACCTCAGGCCAGAAGCCCTGGACACTCCGGGCTTGGGGCTGC
CGTTCTGAGTGTGCGGAAGGCAGGACTCAAAATGAGATCCCATTTGACTCCCTCTGTATG
TACTGTGCCCTCTCCTGCTCTTGAGGCTCTGGAGTCCCAATTGTCTGTGTTAGTCAGTG
ACCAGGTTCCAGGGAATGATGTCATGTGGTGGTCCAACCTACTGGAACCAAGAGACA
GTACTTTGCAAGAAAAGGATCACTGCCAGGTGCACTGGAATTGCTACAGTTTAGTCCGC
ATGATCTCTCTGAAGGAGGAAGCCTGTTTCAAAAATAGTTTCCATCATGAGTCTATCAA
TGAGCTCCACCTCTCCAGCCAGCCTAGAAAGCAAACGAGCTGCCACAGTTTCTTGCCC
TGTCTGGGAGGTTGAGGCCACAGTGTATAGACTGGTAAGCCAGACAGGCCTCTCCCGCA
AGCTGTACCTTGCTTTACCTGTACCTTGGTCCCGGCAGCTAGCTATAAGCAAGAG
GGACAGGAGCCCAGAAGAGACTGAGGACAAGAGATCACACCAGAGTACATGTCTCTGC
CTCTGTTTTAGTGTGGCTTTGGACAGGAATATATGAATAAATCACTGCCATACAGGTTT
TCCAATACACAAGTGCTAGAAAATACACACAATTCCCAATGAAAAAAAAAAAAA

Restriction Sites: Please inquire



ACCN:	NM_024033
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_024033.1 , NP_076938.1
RefSeq Size:	1635 bp
RefSeq ORF:	390 bp
Locus ID:	78996
UniProt ID:	Q9BWK5
Cytogenetics:	7q33

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]

Transcript Variant: This variant (1) encodes the longest isoform (1, also known as MRI-1).