

Product datasheet for **RC200993**

MRI1 (NM_001031727) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRI1 (NM_001031727) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRI1
Synonyms:	M1Pi; MRDI; MTNA; Ypr118w
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200993 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCCTGGAGGCGATCCGCTACTCGCGGGGCTCCCTGCAGATCCTAGACCAGCTGCTGCTGCCAAGC
AGAGCCGCTACGAGGCGGTGGGCTCGGTGCACCAGGCCTGGGAGGCCATCCGCGCCATGAAGGTGCGGGG
CGCCCCGCCATAGCCCTGGTGGCTGTCTCAGCCTCGCCGTGGAGCTGCAGGCGGGCGCCGGGGACCG
GGACTCGCCGCGCTCGTGGCCTTCGTGCGGACAAGCTGAGCTTCTCGTCACCGCCCGCCACCCTGCTAC
TCAACATGGCCCGCGCCCGCCGACCTGGCTGATGTTGCAGCCGGGAGGCCGAACGGGAGGGCGCTAC
GGAAGAGGCGGTCCGGGAGAGAGTATCTGCTGCACCGAGGACATGCTGGAGAAAGACCTCAGAGACAAC
CGAAGCATTGGGGACCTAGGAGCCCGCCACCTCCTGGAGCGGGTGGCCCCAGCGGTGGCAAGGTGACTG
TGCTGACCCTGTAACACTGGTCTTGCCACCGCTGGCTATGGTACAGCCCTAGGTGTGATTCGCTC
ACTGCACAGCCTGGGCGCCTGGAGCATGCCTTCTGCACAGACCCGGCCCTACAACAGGGAGCCCGG
CTGACGGCCTTTGAGCTGGTCTATGAGCAGATCCCCGCCACCCTTATCACCGACAGCATGGTGGCTGCTG
CCATGGCCCATAGGGCGTGTGAGCTGTGGTGTGGGAGCTGACCGCGTGGTTGCCAACGGCGACACAGC
CAACAAGGTGGGCACCTACCAGCTGGCCATTGTGCGCAAGCACCATGGCATTCCCTTCTACGTGGCTGCC
CCCAGCTTTCATGTGACCTCCGCTGGAGACCGGCAAGGAGATCATTATTGAAGAGCGACCCGGCCAGG
AGCTGACCGATGTTAATGGGGTCCGGATTGCAGCACCTGGGATTGGAGTTTGAATCCTGCCTTCGATGT
CACCCCCACGACCTCATCACTGGTGGCATCATCACAGAAGTGGGGTCTTTGCCCTGAGGAGCTCCGG
ACAGCCCTAACCCACCACCATCTCTCCAGGGATGGAACCTAGATGGACCCAGATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC200993 protein sequence
Red=Cloning site Green=Tags(s)

MTLEAIRYSRGSLLDQLLLPKQSRYEAVGSVHQAWAETIRAMKVRGAPAIALVGCLSLAVELQAGAGGP
 GLAALVAFVRDKLSFLVTARPTAVNMARAARDLADVAAREAEREGATEEAVRERVICCTEDMLEKDLRDN
 RSIGDLGARHLLERVAPSGGKVTVLTHCNTGALATAGYGTALGVIRSLHSLGRLEHAFCTETRPYNQGAR
 LTAFELVYEQIPATLITDSMVAAMAHRGVSAVVVGADRVVANGDTANKVGTYQLAIVAKHHGIPFYVAA
 PSSSCDLRLETGKEIIIEERPGQELTDVNGVRIAAPGIGVWNPAPFDVTPHDLITGGIITELGVFAPEELR
 TALTTTISRDTLDGPM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6392_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001031727

ORF Size: 1107 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_001031727.4](#)

RefSeq Size: 3177 bp

RefSeq ORF: 1110 bp

Locus ID: 84245

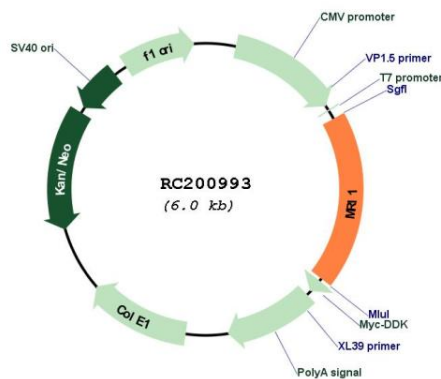
UniProt ID: [Q9BV20](#)

Cytogenetics: 19p13.13

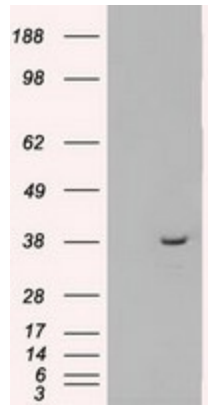
MW: 39.1 kDa

Gene Summary: This enzyme functions in the methionine salvage pathway by catalyzing the interconversion of methylthioribose-1-phosphate and methylthioribulose-1-phosphate. Elevated expression of the encoded protein is associated with metastatic melanoma and this protein promotes melanoma cell invasion independent of its enzymatic activity. Mutations in this gene may be associated with vanishing white matter disease (VMWD). [provided by RefSeq, Jul 2016]

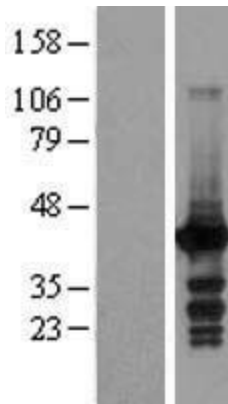
Product images:



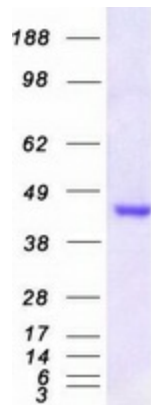
Circular map for RC200993



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MRI1 (Cat# RC200993, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MRI1 (Cat# [TA500433]). Positive lysates [LY422176] (100ug) and [LC422176] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY422176]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200993 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRI1 protein (Cat# [TP300993]). The protein was produced from HEK293T cells transfected with MRI1 cDNA clone (Cat# RC200993) using MegaTran 2.0 (Cat# [TT210002]).