

Product datasheet for **RC201003**

MSI2 (NM_138962) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSI2 (NM_138962) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MSI2
Synonyms:	MSI2H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201003 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGCCAAATGGGAGCCAAGGCACCTCGGGCAGCGCCAACGACTCCCAGCAGCACCCCGGTAAAATGT
TTATCGGTGGACTGAGCTGGCAGACCTCACCAGATAGCCTTAGAGACTATTTAGCAAATTTGGAGAAAT
TAGAGAATGTATGGTCATGAGAGATCCCACTACGAAACGCTCCAGAGGCTTCGGTTTCGTCACGTTTCGCA
GACCCAGCAAGTGTAGATAAAGTATTAGGTCAGCCCCACCATGAGTTAGATTCCAAGACGATTGACCCCA
AAGTTGCATTTCTCGTCGAGCGCAACCCAAGATGGTCACGAGAACAAGAAAATATTTGTAGGCGGGTT
ATCTGCGAACACAGTAGTGAAGATGTAAGCAATATTTGAGCAGTTTGGCAAGGTGGAAGATGCAATG
CTGATGTTTGATAAACTACCAACAGGCACAGAGGGTTTGGCTTTGTCACTTTTGAGAATGAAGATGTTG
TGGAGAAAGTCTGTGAGATTCAATTTCCATGAAATCAATAAATAAATGGTGAATGTAAGAAAGCTCAGCC
GAAAGAAGTCAATGTTCCACCTGGGACAAGAGGCCGGGCCGGGGACTGCCTTACACCATGGACGCGTTC
ATGCTTGGCATGGGGATGCTGGGATATCCCAACTTCGTGGCGACCTATGGCCGTGGCTACCCCGATTTC
CTCAAGCTATGGCTATCAGTTCCAGGCTTCCAGCAGCGGCTTATGGACCAGTGGCAGCAGCGGGCT
GGCGGCAGCAAGAGGATCAGGCTCCAACCCGGCGCGCCCGGAGGCTTCCCGGGGCCAACAGCCAGGA
CCTGTCCCGATCTCTACGGCCCTGCCAGCCAGGACTCCGGAGTGGGAATTACATAAGTCCGGCCAGCC
CACAGCCGGGCTCGGGCTTCGGCCACGGCATAGCTGGACCTTTGATTGCAACGGCCCTTACAATGGATA
CCAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201003 protein sequence
Red=Cloning site Green=Tags(s)

MEANGSQGTSGSANDSQHDPGKMF IGGLSWQTSPLSLRDYFSKFGEI RECMVMRDPTTKRSRGGFVTFADPASVDKVLGQPHHELD SKTIDPKVAFPRRAQPKMVRTKKIFVGGLSANTVVEDVKQYFEQFGKVEDAM LMFDKTTNRHRGFGFVTFENEDVVEKVC EIHFEINNKMVECKKAQPKV MFPPGTRGRARGLPYTMDAF MLGMGMLGYPNFVATYGRGYPGFAPS YGYQFPGFPAAAYGPVAAA AAAAAARGSGSNPARPGGFPGANS PG PVADLYGPASQDSGVGN YISAAS PQPGSGFGHGIAGPLIATAFTNGYH

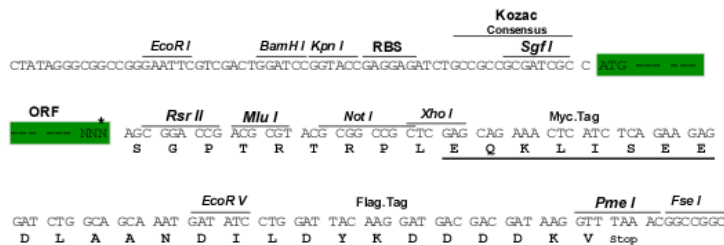
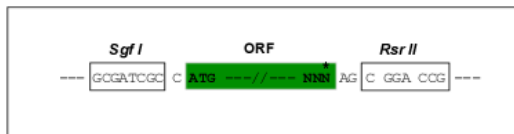
SGPTRTRPLEQKL I SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6189_a10.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_138962

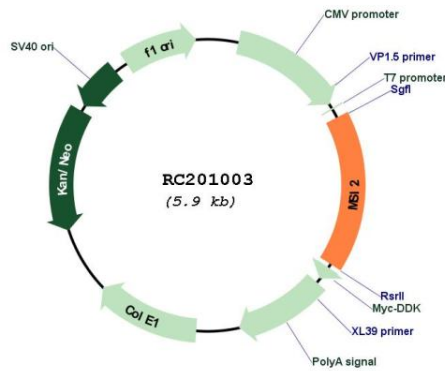
ORF Size: 984 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

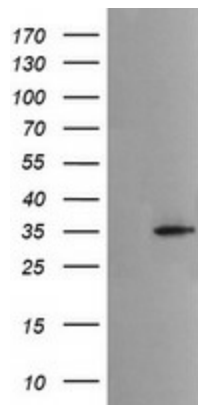
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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:	<u>NM_138962.1</u>
RefSeq Size:	1581 bp
RefSeq ORF:	987 bp
Locus ID:	124540
UniProt ID:	<u>Q96DH6</u>
Cytogenetics:	17q22
MW:	35.2 kDa
Gene Summary:	This gene encodes an RNA-binding protein that is a member of the Musashi protein family. The encoded protein is transcriptional regulator that targets genes involved in development and cell cycle regulation. Mutations in this gene are associated with poor prognosis in certain types of cancers. This gene has also been shown to be rearranged in certain cancer cells. [provided by RefSeq, Apr 2016]

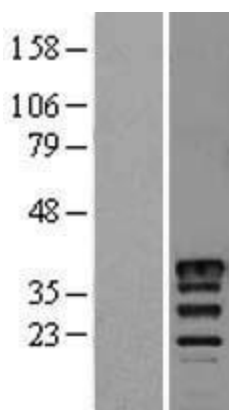
Product images:



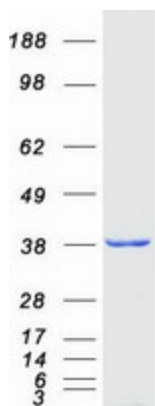
Circular map for RC201003



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MSI2 (Cat# RC201003, 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-MSI2 (Cat# [TA506196]). Positive lysates [LY403371] (100ug) and [LC403371] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403371]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201003 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MSI2 protein (Cat# [TP301003]). The protein was produced from HEK293T cells transfected with MSI2 cDNA clone (Cat# RC201003) using MegaTran 2.0 (Cat# [TT210002]).