

Product datasheet for **RC219518**

MDM2 (NM_002392) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MDM2 (NM_002392) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MDM2
Synonyms:	ACTFS; hdm2; HDMX; LSKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219518 representing NM_002392
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGAGGAGCAGGCAATGTGCAATACCAACATGTCTGTACCTACTGATGGTGTGTAACCACCTCAC
 AGATTCACAGTTTCGGAACAAGAGACCCTGGTTAGACCAAAGCCATTGCTTTTGAAGTTATTAAGTCTGT
 TGGTGCAAAAAAGACACTTATACTATGAAAGAGGTTCTTTTTTATCTTGCCAGTATATTATGACTAAA
 CGATTATATGATGAGAAGCAACAACATATTGTATATTGTTCAAATGATCTTCTAGGAGATTTGTTTGGCG
 TGCCAAGCTTCTCTGTGAAAGAGCACAGGAAAATATATACCATGATCTACAGGAACCTGGTAGTAGTCAA
 TCAGCAGGAATCATCGGACTCAGGTACATCTGTGAGTGAGAACAGGTGTACCTTGAAGGTGGGAGTGAT
 CAAAAGGACCTTGTACAAGACTTCAGGAAGAGAAAACCTTCATCTTCACATTTGGTTTCTAGACCATCTA
 CCTCATCTAGAAGGAGCAATTAGTGAGACAGAAGAAAATTGATGAATTATCTGGTGAACGACAAG
 AAAACGCCACAAATCTGATAGTATTTCCCTTTCCCTTTGATGAAAGCCTGGCTCTGTGTGTAATAAGGGAG
 ATATGTTGTGAAAGAAGCAGTAGCAGTGAATCTACAGGGACGCCATCGAATCCGGATCTTGATGCTGGTG
 TAAGTGAACATTCAGGTGATTGGTTGGATCAGGATTCAGTTTCAGATCAGTTTAGTGTAGAATTTGAAGT
 TGAATCTCTCGACTCAGAAGATTATAGCCTTAGTGAAGAAGGACAAGAATCTCAGATGAAGATGATGAG
 GTATATCAAGTTACTGTGTATCAGGCAGGGGAGAGTGATACAGATTCATTTGAAGAAGATCCTGAAATTT
 CCTTAGCTGACTATTGGAATGCACTTCATGCAATGAAATGAATCCCCCCTTCCATCACATTGCAACAG
 ATGTTGGGCCCTTCGTGAGAATTGGCTTCTGAAGATAAAGGGAAAGATAAAGGGGAAATCTCTGAGAAA
 GCCAACTGGAAAACCAACACAAGCTGAAGAGGGCTTTGATGTTCTGATTGAAAAAACTATAGTGA
 ATGATTCAGAGAGTCACTGTGTTGAGGAAAATGATGATAAAAATTACACAAGCTTCACAATCACAAGAAA
 TGAAGACTATTCTCAGCCATCAACTTCTAGTAGCATTATTTATAGCAGCCAAGAAGATGTGAAAGATTT
 GAAAGGGAAGAAACCAAGACAAAGAAGAGAGTGTGGAATCTAGTTTGCCCTTAATGCCATTGAACCTT
 GTGTGATTTGTCAAGGTCGACCTAAAAATGGTTGCATTGTCCATGGCAAAACAGGACATCTTATGCCTG
 CTTTACATGTGCAAGAAGCTAAAGAAAAGGAATAAGCCCTGCCAGTATGTAGACAACCAATTCAAATG
 ATTGTGCTAACTTATTCCCC

**ACCGGTACGGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence:

>RC219518 representing NM_002392
 Red=Cloning site Green=Tags(s)

MVRSRQMCNTNMSVPTDGAVTTSQIPASEQETLVRPKPLLLKLLKSVGAQKDYTMKEVLFYLGQYIMTK
 RLYDEKQQHIVYCSNDLLGDLFGVPSFSVKEHRKIYTMIIYRNLVVVNQQESSDSGTSVSENRCHEGGSD
 QKDLVQELQEEKPSSSHLVSRPSTSSRRRAISETEENSDEL SGERQQRKRHKSISLSFDESLALCVIRE
 ICCERSSSESTGTPSNPDL DAGVSEHSGDWLDQDSVSDQFSVEFEVESLDSYSLSEEGQELSDDEDDE
 VYQVTVYQAGESDTSFEEDPEISLADYWKCTSCNEMNPPLPSHCNRCWALRENWLPEDKKGDKGEISEK
 AKLENSTQAEEGFDVPDCKKTIVNDSRESCVEENDDKITQASQSQESSEDYSQPSTSSSIIYSSQEDVKEF
 EREETQDKESVSSLPLNAIEPCVICQGRPKNGCIVHGKTGHLMACFTCAKLLKRNKPCPVCRQPIQM
 IVLTYFP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2586_a06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_002392

ORF Size: 1491 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](#)

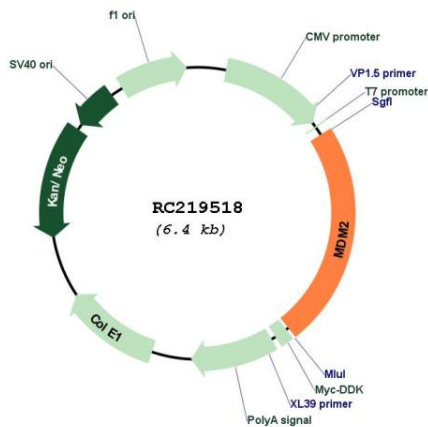
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

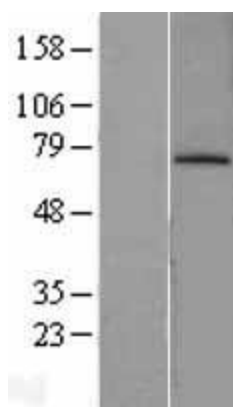
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_002392.5
RefSeq Size:	2357 bp
RefSeq ORF:	1494 bp
Locus ID:	4193
UniProt ID:	Q00987
Cytogenetics:	12q15
Domains:	zf-RanBP, MDM2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Bladder cancer, Cell cycle, Chronic myeloid leukemia, Endocytosis, Glioma, Melanoma, p53 signaling pathway, Pathways in cancer, Prostate cancer, Ubiquitin mediated proteolysis
MW:	55.8 kDa
Gene Summary:	This gene encodes a nuclear-localized E3 ubiquitin ligase. The encoded protein can promote tumor formation by targeting tumor suppressor proteins, such as p53, for proteasomal degradation. This gene is itself transcriptionally-regulated by p53. Overexpression or amplification of this locus is detected in a variety of different cancers. There is a pseudogene for this gene on chromosome 2. Alternative splicing results in a multitude of transcript variants, many of which may be expressed only in tumor cells. [provided by RefSeq, Jun 2013]

Product images:



Circular map for RC219518



Western blot validation of overexpression lysate (Cat# [LY400855]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219518 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).