

Product datasheet for **RC200251**

MRG15 (MORF4L1) (NM_006791) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRG15 (MORF4L1) (NM_006791) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRG15
Synonyms:	Eaf3; FWP006; HsT17725; MEAF3; MORFRG15; MRG15; S863-6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200251 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCGCCGAAGCAGGACCCGAAGCCTAAATTCCAGGAGGGTGAGCGAGTGCTGTGCTTTCATGGGCCTC
 TTCTTTATGAAGCAAAGTGTGTAAAGTTGCCATAAAGGACAAACAAGTAAATACTTCATACATTACAG
 TGGTTGGAATAAAAAATTGGGATGAATGGGTTCCGGAGAGCAGAGTACTCAAATACGTGGACCAATTTG
 CAGAAACAGCGAGAATCTCAAAAAGCCAATCAGGAGCAGTATGCAGAGGGGAAGATGAGAGGGGCTGCC
 CAGGAAAGAAGACATCTGGTCTGCAACAGAAAAATGTTGAAGTGAACGAAAAAGAAACAGAAAAAC
 ACCTGGAATGGAGATGGTGGCAGTACCAGTGAGACCCCTCAGCCTCCTCGGAAGAAAAGGGCCCGGTA
 GATCCTACTGTTGAAAATGAGGAAACATTCATGAACAGAGTTGAAGTTAAAGTAAAGATTCTGAAGAGC
 TAAACCGTGGCTTGTGATGACTGGGACTTAATTACCAGGCAAAACAGCTCTTTATCTTCTGCCAA
 GAAGAATGTGGATTCCATTCTTGAGGATTATGCAATTACAAGAAATCTCGTGGAACACAGATAATAAG
 GAGTATGCGGTTAATGAAGTTGTGGCAGGGATAAAGAATACTTCAACGTAATGTTGGGTACCCAGCTAC
 TCTATAAATTTGAGAGACCACAGTATGCTGAAATCTTGACAGATCATCCCGATGCACCCATGTCCAGGT
 GTATGGAGCGCCACATCTCTGAGATTATTTGTACGAATTGGAGCAATGTTGGCTTATACACCTCTGGAT
 GAGAAGAGCCTTGCTTTATTACTCAATTATCTTCACGATTTCTAAAGTACCTGGCAAAGAATTCTGCAA
 CTTTGTTCAGTGCCAGCGATTATGAAGTGGCTCCTCCTGAGTACCATCGAAAGCTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Protein Sequence: >RC200251 protein sequence
 Red=Cloning site Green=Tags(s)

MAPKQDPKPKFQEGERVLCFHGPLL YEAKCVKVAIKDKQVKYFIHYSWNKNWDEWVPESRVLK YVDTNL
 QKQRELQKANQEQAEGKMRGAAPGKKT SGLQQKNVEVKTKKNKQKTPGNGDGGSTSETPQPPRKKRARV
 DPTVENEETFMNRVEVKVKIPEELKPWL VDDWDLITRQKQLFYLPAAKNVDSILEDYANYKKS RGTNDNK
 EYAVNEVVAGIKEYFNVMLGTQLLYKFERPQYAEILADHPDAPMSQVYGAPHLRL FVRIGAMLAYTPLD
 EKSLALLLN YLHDFLKYLA KNSATLFSASDYEVA PPEYHRKAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6057_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006791

ORF Size: 969 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006791.4](#)

RefSeq Size: 1894 bp

RefSeq ORF: 972 bp

Locus ID: 10933

UniProt ID: [Q9UBU8](#)

Cytogenetics: 15q25.1

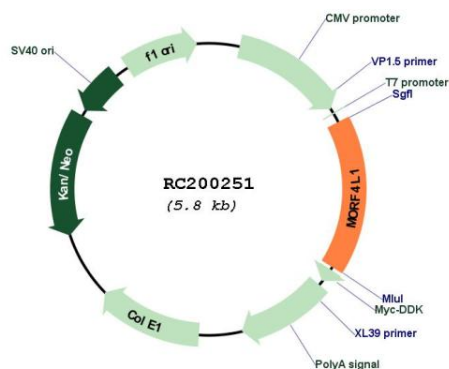
Domains: CHROMO

Protein Families: Transcription Factors

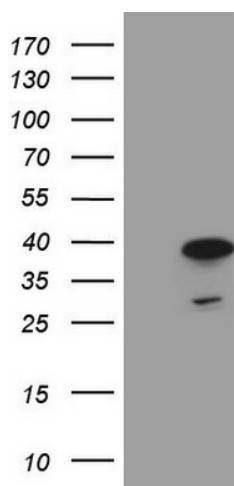
MW: 37.2 kDa

Gene Summary: Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. Also component of the mSin3A complex which acts to repress transcription by deacetylation of nucleosomal histones. Required for homologous recombination repair (HRR) and resistance to mitomycin C (MMC). Involved in the localization of PALB2, BRCA2 and RAD51, but not BRCA1, to DNA-damage foci. [UniProtKB/Swiss-Prot Function]

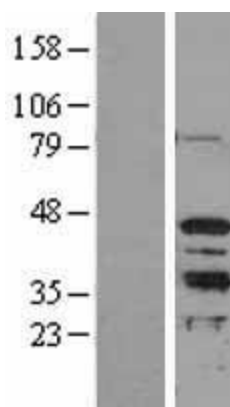
Product images:



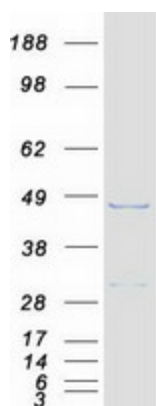
Circular map for RC200251



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MORF4L1 (Cat# RC200251, 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-MORF4L1 (Cat# [TA808423])(1:2000). Positive lysates [LY402027] (100ug) and [LC402027] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402027]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200251 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MORF4L1 protein (Cat# [TP300251]). The protein was produced from HEK293T cells transfected with MORF4L1 cDNA clone (Cat# RC200251) using MegaTran 2.0 (Cat# [TT210002]).