

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for RG232233

MRG15 (MORF4L1) (NM_001265605) Human Tagged ORF Clone

Product data:

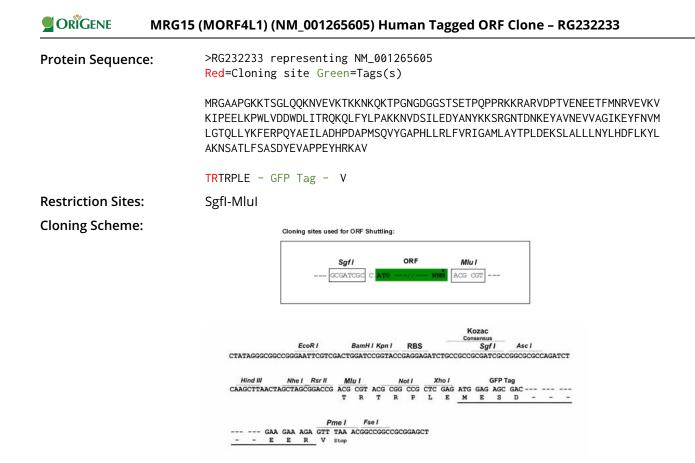
Product Type:	Expression Plasmids
Product Name:	MRG15 (MORF4L1) (NM_001265605) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MORF4L1
Synonyms:	Eaf3; FWP006; HsT17725; MEAF3; MORFRG15; MRG15; S863-6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	<pre>>RG232233 representing NM_001265605 Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGAGAGGGGCTGCCCCAGGAAAGAAGACATCTGGTCTGCAACAGAAAAATGTTGAAGTGAAAACGAAAA

ATGAGAGGGGCTGCCCCAGGAAAGAAGAAGAACATCTGGTCTGCAACAGAAAAATGTTGAAGTGAAAACGAAAA AGAACAAACAGAAAACACCTGGAAATGGAGATGGTGGCAGTACCAGTGAGACCCCTCAGCCTCCTCGGAA GAAAAGGGCCCGGGTAGATCCTACTGTTGAAAATGAGGAAACATTCATGAACAGAGTTGAAGTTAAAGTA AAGATTCCTGAAGAGCTAAAACCGTGGCTTGTTGATGACGGGACTTAATTACCAGGCAAAAACAGCTCT TTTATCTTCCTGCCAAGAAGAATGTGGATTCCATTCTTGAGGATTATGCAAATTACCAGGCAAAAACAGCTCT TTTATCTTCCTGCCAAGAAGAATGTGGGTTAATGAAGTTGTGGCAGGGATAAAAGAATCTCCGTGG AAACACAGATAATAAGGAGTATGCGGTTAATGAAGTTGTGGCAGGGATAAAAGAATACTTCAACGTAATG TTGGGTACCCAGCTACTCTATAAATTTGAAGAGCCACAGTATGCTGAAATTCTTGCAGATCATCCCGATG CACCCATGTCCCAGGTGTATGGAGCCCACACTCTCCTGAGATTATTTGTACGAATTGGAGCAATGTTGGC TTATACACCTCTGGATGAGAAGAGCCTTGCTTTATTACTCAATTATCTTCACGATTGGAGCAATGTTGGC GCAAAGAATTCTGCAACTTTGTTCAGTGCCAGCGATTATGAAGTGGCTCCTCCTGAGTACCATCGGAAAG CTGTG

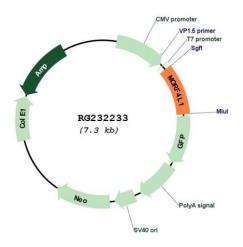
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Plasmid Map:



ACCN: ORF Size: NM_001265605 705 bp

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

ORIGENE MRG15 (MORF4L1) (NM_001265605) Human Tagged ORF Clone – RG232233	
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. <u>More info</u>
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	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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:	<u>NM 001265605.1, NP 001252534.1</u>
RefSeq Size:	1747 bp
RefSeq ORF:	708 bp
Locus ID:	10933
UniProt ID:	<u>Q9UBU8</u>
Cytogenetics:	15q25.1
Protein Families:	Transcription Factors
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]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., <u>9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US</u>