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Product datasheet for RC221486

MAFG (NM_002359) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAFG (NM_002359) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAFG
Synonyms:	hMAF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221486 representing NM_002359
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGACCCCCAATAAAGGAAACAAGGCCTTGAAGGTGAAGCGGGAGCCGGGTGAGAATGGCACCAGCC
TGACGGATGAGGAGCTGGTGACCATGTCGGTGCGGGAGCTGAACCAGCACCTGCGGGGCCTGTCCAAGGA
GGAGATCGTCCAGCTGAAGCAGCGCCGGCGCACGCTCAAGAACCGCGGCTACGCTGCCAGCTGCCGCGTG
AAGCGGGTGACGCAGAAGGAGGAGCTGGAGAAGCAGAAGGCGGAGCTGCAGCAGGAGGTGGAGAAGCTGG
CCTCAGAGAACGCCAGCATGAAGCTGGAGCTCGACGCGCTGCGCTCCAAGTACGAGGCGCTGCAGACCTT
CGCCCGGACGGTGGCCCGCAGCCCCGTGGCGCCAGCCCGGGGCCCCCTTGCCGCCGGCCTGGGGCCCCTC
GTCCCAGGCAAGGTGGCCGCCACCAGCGTCATCACAATAGTAAAGTCCAAGACGGATGCCCGATCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221486 representing NM_002359
Red=Cloning site Green=Tags(s)

MTTPNKGNKALKVKREPGENGTSLTDEELVTMSVRELNQHLRGLSKEEIVQLKQRRRTLKNRGYAASCRV
KRVTQKEELEKQKAELQQEVEKLASENASMKLELDALRSKYEALQTFARTVARSPVAPARGPLAAGLGPL
VPGKVAATSVITIVKSKTDARS

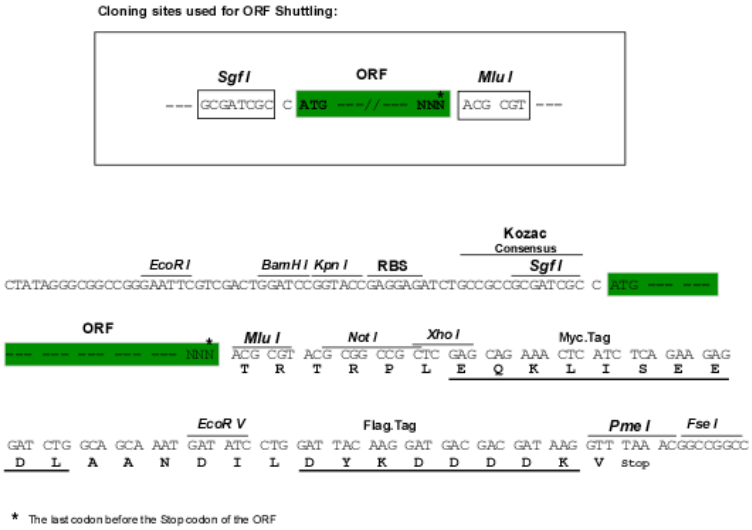
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6430_h12.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002359

ORF Size: 486 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.

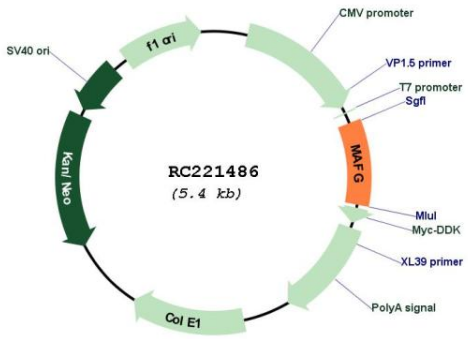
RefSeq: NM_002359.4

RefSeq Size: 5043 bp

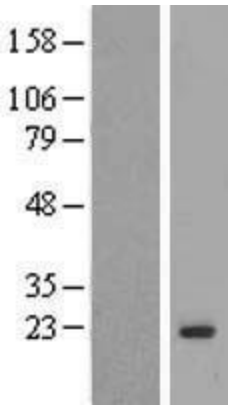
RefSeq ORF: 489 bp

Locus ID:	4097
UniProt ID:	O15525
Cytogenetics:	17q25.3
Domains:	bZIP_Maf, BRLZ
Protein Families:	Druggable Genome, Transcription Factors
MW:	17.7 kDa
Gene Summary:	Globin gene expression is regulated through nuclear factor erythroid-2 (NFE2) elements located in enhancer-like locus control regions positioned many kb upstream of alpha- and beta-gene clusters (summarized by Blank et al., 1997 [PubMed 9166829]). NFE2 DNA-binding activity consists of a heterodimer containing a ubiquitous small Maf protein (MafF, MIM 604877; MafG; or MafK, MIM 600197) and the tissue-restricted protein p45 NFE2 (MIM 601490). Both subunits are members of the activator protein-1-like superfamily of basic leucine zipper (bZIP) proteins (see MIM 165160).[supplied by OMIM, Mar 2010]

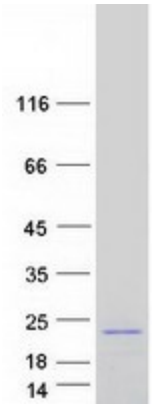
Product images:



Circular map for RC221486



Western blot validation of overexpression lysate (Cat# [LY419371]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221486 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAFG protein (Cat# [TP321486]). The protein was produced from HEK293T cells transfected with MAFG cDNA clone (Cat# RC221486) using MegaTran 2.0 (Cat# [TT210002]).