

Product datasheet for MR225889

Maf1 (NM_001164608) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Maf1 (NM_001164608) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Maf1
Synonyms: 1110068E11Rik; AU042856
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR225889 representing NM_001164608
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCTATTGGAGAACTCCAGCTTTGAGGCCATCAACTCACAGTTGACAGTGGAGACTGGAGATGCC
 ATATTATTGGCAGGATTGAAAGCTACTCGTGAAGATGGCGGGAGATGATAAACATATGTTCAAGCAGTT
 CTGCCAGGAGGGCCAGCCCCATGTGTTGGAGGCACTGTCCCCACCCAACTTCAGGCCTCAGTCCCAGC
 AGACTGAGCAAGAGCCAGGGTGGTGGAGATGAGAGTCTCTGAGCGACAAGTGCAGCCGCAAGACCCCTCT
 TCTATCTGATTGCCACCCTCAATGAGTCTTCCGGCCAGACTATGACTTCAGCACAGCCAGAAGTCATGA
 ATTCAGCCGAGAGCCAAGCCTCCGCTGGTGGTAAATGCAGTCAACTGCAGCCTGTTTTAGCTGTTTCTGT
 GAAGACTTCAAGGCCCTGAAGCCACAGCTGTGGAATGCAGTGGATGAGGAGATCTGCTTAGCTGAGTGTG
 ACATCTACAGCTATAACCCAGATCTAGACTCCGACCCCTTTGGGGAAGATGGAAGCCTCTGGTCATTCAA
 CTATTTCTTTTACAATAAGAGACTGAAGCGAATTGTCTTTAGCTGCCGCTCCATCAGTGGCTCCACG
 TACACACCCTCAGAGGCAGGCAATGCACTGGACTTGGAACTGGGGCAGAGGAGGCTGATGAAGAGAGTG
 GAGGTGGAGGCGGTGAGGGCAGGGCAGAGGAGACCAGCACCATGGAGGAAGACAGGGTCCAGTGATCTG
 TATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR225889 representing NM_001164608
 Red=Cloning site Green=Tags(s)

MKLLNSSFEAINSQLTVETGDAHIIGRIESYSCKMAGDDKHMFKQFCQEGQPHVLEALSPPTSGLSPLS
 RLSKSQGGEDSPLSDKCSRKTLFYLIATLNEFRPDYDFSTARSHF SREPSLRWVNVNCSLFSAVR
 EDFKALKPQLWNAVDEEICLAECDIYSYNDLSDPFGE DGSLSWFSNYFFYNKRLKRIVFFSCRSISGST
 YTPSEAGNALDLELGAEAEDEESGGGGEGRAEETSTMEEDRVPVICM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001164608

ORF Size: 774 bp

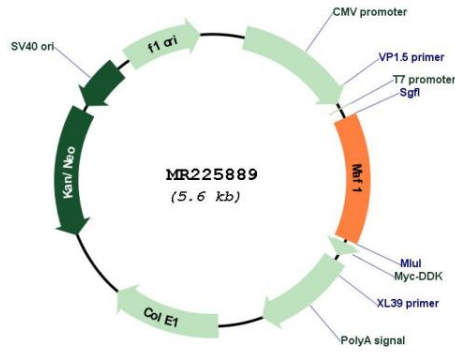
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
RefSeq:	<u>NM_001164608.1</u> , <u>NP_001158080.1</u>
RefSeq Size:	1656 bp
RefSeq ORF:	777 bp
Locus ID:	68877
UniProt ID:	<u>Q9D0U6</u>
Cytogenetics:	15 D3
MW:	29.2 kDa
Gene Summary:	Plays a role in the repression of RNA polymerase III-mediated transcription in response to changing nutritional, environmental and cellular stress conditions to balance the production of highly abundant tRNAs, 5S rRNA, and other small non-coding RNAs with cell growth and maintenance (By similarity). Plays also a key role in cell fate determination by promoting mesoderm induction and adipocyte differentiation (PubMed:30110641). Mechanistically, associates with the RNA polymerase III clamp and thereby impairs its recruitment to the complex made of the promoter DNA, TBP and the initiation factor TFIIB. When nutrients are available and mTOR kinase is active, MAF1 is hyperphosphorylated and RNA polymerase III is engaged in transcription. Stress-induced MAF1 dephosphorylation results in nuclear localization, increased targeting of gene-bound RNA polymerase III and a decrease in the transcriptional readout. Additionally, may also regulate RNA polymerase I and RNA polymerase II-dependent transcription through its ability to regulate expression of the central initiation factor TBP (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225889