

Product datasheet for RC402778

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c Maf (MAF) (NM_005360) Human Mutant ORF Clone

Product data:

Product Type: Mutant ORF Clones

Product Name: c Maf (MAF) (NM_005360) Human Mutant ORF Clone

Mutation Description: R299S

Affected Codon#: 299

Affected NT#: 895

Nucleotide Mutation: MAF Mutant (R299S), Myc-DDK-tagged ORF clone of Homo sapiens v-maf musculoaponeurotic

fibrosarcoma oncogene homolog (avian) (MAF), transcript variant 1 as transfection-ready DNA

Effect: Cataract-microcornea syndrome

Symbol: MAF

Synonyms: AYGRP; c-MAF; CCA4; CTRCT21

E. coli Selection: Kanamycin (25 ug/mL)

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

Tag: Myc-DDK
ACCN: NM 005360

ORF Size: 1209 bp

Restriction Sites: Sgfl-Rsrll



ORF Nucleotide Sequence:

>RC402778 representing NM_005360
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCATCAGAACTGGCAATGAGCAACTCCGACCTGCCCACCAGTCCCCTGGCCATGGAATATGTTAATG CCGTCTCATCGCCGGGGGCTCGCTGTCCTCCACCCCCATGAGCACGCCGTGCAGCTCGGTGCCCCCTTCC CCCAGCTTCTCGGCGCCCAGCCCGGGCTCGGGCAGCAGCAGAAGGCGCACCTGGAAGACTACTACTGGA TGACCGGCTACCCGCAGCAGCTGAACCCCGAGGCGCTTCAGCCCCGAGGACGCGGTCGAGGCGCT GCGGCCGGGGCCGTGCCGCCCTCCTTGGGCGGCAGCGAGAGATGGGCCCCGCCGCCGCCGTGG TGTCCGCCGTGATCGCCGCGCCGCCGCCGCAGAGCGGCGCGGGCCCGCACTACCACCACCACCACCACCA GAGGCGGCGGGGGCGGGGGGGGGGGCCCCTGCACCCGCACCACGCCGCCGCGCGCCTGCACTT CGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGAGCTGAACCGGCAGCTGCGCGGG GTCAGCAAGGAGGAGGTGATCCGGCTGAAGCAGAAGAGGCGGACCCTGAAAAAACAGCGGCTATGCCCAGT CCTGCCGCTTCAAGAGGGTGCAGCAGAGACACGTCCTGGAGTCGGAGAAGAACCAGCTGCTGCAGCAAGT CGACCACCTCAAGCAGGAGATCTCCAGGCTGGTGCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAG TTGGTGAGCAGCGGCTTCCGAGAAAACGGCTCGAGCAGCGACACCCGTCCTCTCCCGAGTTTTTCATAA CTGAGCCCACTCGCAAGTTGGAGCCATCAGTGGGATACGCCACATTTTGGAAGCCCCAGCATCGTGTACT TACCAGTGTGTTCACAAAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC TGGATTACAAGGATGACGACGA TAAG**GTTTAA**

Protein Sequence:

>RC402778 representing NM_005360 Red=Cloning site Green=Tags(s)

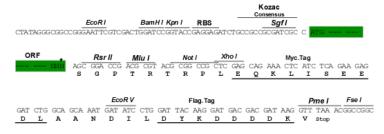
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites: Sgfl-Rsrll



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

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:

Domains:

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).

RefSeq: NP 005351 RefSeq Size: 1209 bp 1212 bp 4094

bZIP Maf, BRLZ **Protein Families:** Druggable Genome, Transcription Factors

MW: 44.3 kDa





Gene Summary:

The protein encoded by this gene is a DNA-binding, leucine zipper-containing transcription factor that acts as a homodimer or as a heterodimer. Depending on the binding site and binding partner, the encoded protein can be a transcriptional activator or repressor. This protein plays a role in the regulation of several cellular processes, including embryonic lens fiber cell development, increased T-cell susceptibility to apoptosis, and chondrocyte terminal differentiation. Defects in this gene are a cause of juvenile-onset pulverulent cataract as well as congenital cerulean cataract 4 (CCA4). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]