

Product datasheet for **RC402777**

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:	K297R
Affected Codon#:	297
Affected NT#:	890
Nucleotide Mutation:	MAF Mutant (K297R), Myc-DDK-tagged ORF clone of Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) (MAF), transcript variant 1 as transfection-ready DNA
Effect:	Cerulean cataract
Symbol:	MAF
Synonyms:	AYGRP; c-MAF; CCA4; CTRCT21
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_005360
ORF Size:	1209 bp
Restriction Sites:	Sgfl-RsrII



[View online »](#)

ORF Nucleotide Sequence:

>RC402777 representing NM_005360
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCATCAGAACTGGCAATGAGCAACTCCGACCTGCCACCAGTCCCCTGGCCATGGAATATGTTAATG
 ACTTCGATCTGATGAAGTTTGAAGTGAAAAAGGAACCGGTGGAGACCGACCGCATCATCAGCCAGTGCGG
 CCGTCTCATCGCCGGGGCTCGCTGTCTCCACCCCATGAGCACGCCGTGCAGCTCGGTGCCCCCTCC
 CCCAGCTTCTCGGCGCCAGCCGGGCTCGGGCAGCGAGCAGAAGGCGCACCTGGAAGACTACTACTGGA
 TGACCGGCTACCCGCAGCAGCTGAACCCGAGGCGCTGGGCTTACGCCCCGAGGACGCGGTGAGGCGCT
 CATCAGCAACAGCCACCAGCTCCAGGGCGGCTTCGATGGCTACGCGCGGGGCGCAGCAGCTGGCCGCG
 GCGGCCGGGGCCGGTCCCGGCGCTCCTTGGGCGCAGCGGCGAGGAGATGGGCCCGCCGCGCGGCGG
 TGTCCGCGTGATCGCCGCGGCCCGCGCAGAGCGGCGGGCCGCGACTACCACCACCACCACCACCA
 CGCCGCGGCCACCACCACCACCAGCGCCGCGCGCCGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCG
 GGTGGCGCTGGGGGCGCGGGCGGCGGTGGCCCGCCAGCGCTGGGGGCGGCGGCGGCGGCGGCGGCGG
 GAGGCGCGGGGGCGCGGGGGGGGGGGGGCGCCCTGCACCCGACCCAGCCGCGCGGCGGCGGCGGCTGCACTT
 CGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGAGCTGAACCGGCAGCTGCGCGGG
 GTCAGCAAAGGAGGAGGTGATCCGGTGAAGCAGAAGAGGCGGACCCTGAGAAACCGCGGCTATGCCAGT
 CCTGCCGCTTCAAGAGGGTGCAGCAGAGACCGTCTGGAGTCCGAGAAGAACCAGCTGCTGCAGCAAGT
 CGACCACCTCAAGCAGGAGATCTCCAGGCTGGTCCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAG
 TTGGTGAGCAGCGGCTTCCGAGAAAACGGCTCGAGCAGCGACAACCCGCTCTCTCCGAGTTTTTTCATAA
 CTGAGCCCACTCGAAGTTGGAGCCATCAGTGGGATACGCCACATTTTGAAGCCCCAGCATCGTGTACT
 TACCAGTGTGTTCAAAAA

AG**GCGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402777 representing NM_005360
 Red=Cloning site Green=Tags(s)

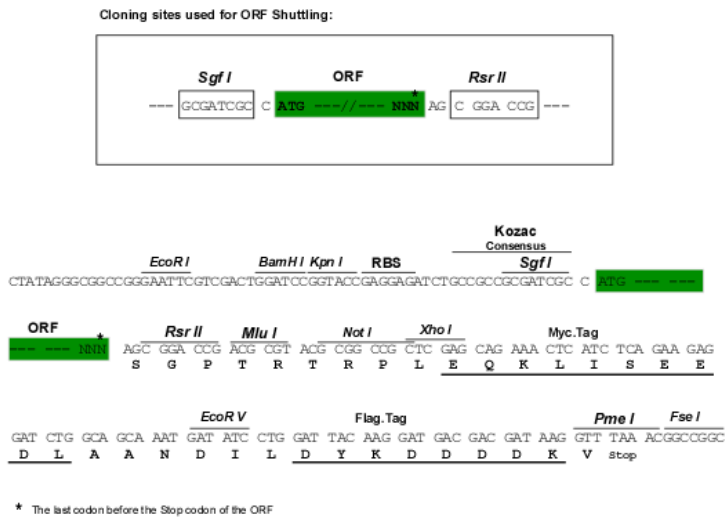
MASELAMNSDLPTSPLAMEYVNDFDLMKFEVKKEPVETDRIISQCGRLIAGGSLSSTPMSTPCSSVPPS
 PSFSAPSPGSGSEQKAHLEDYYWMTGYPQQLNPEALGFSPEDAVALISNSHQLQGGFDGYARGAQQQLAA
 AAGAGAGASLGGSGEEMGPAAAVVSAIAAAAAQSGAGPHYHHHHHAAGHHHPTAGAPGAAGSAAASA
 GGAGGAGGGGPASAGGGGGGGGGGGGAAGAGGALHPHHAAGGLHFDDRFSDQLVTMSVRELNRQLRG
 VSKEEVIRLQKRRRTLNRGYAQSCRFRVQRHVLESEKNQLLQQVDHLKQEI SRLVRERDAYKEKYEK
 LVSSGFRENGSSSDNPSSPEFFITEPTRKLEPSVGYATFWKPQHRVLT SVFTK

SGPTRRRLEQKLI**SEEDLAANDILDYKDDDDKV**

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



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:

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

RefSeq ORF:

1212 bp

Locus ID:

4094

Cytogenetics:

16q23.2

Domains:

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]