

## **Product datasheet for RC402776**

## 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

OriGene Technologies, Inc.

# 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: R288P
Affected Codon#: 288
Affected NT#: 863

**Nucleotide Mutation:** MAF Mutant (R288P), 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, ocular anterior dysgenesis and coloboma

Symbol: c 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:

>RC402776 representing NM\_005360
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCATCAGAACTGGCAATGAGCAACTCCGACCTGCCCACCAGTCCCCTGGCCATGGAATATGTTAATG CCGTCTCATCGCCGGGGGCTCGCTGTCCTCCACCCCCATGAGCACGCCGTGCAGCTCGGTGCCCCCTTCC CCCAGCTTCTCGGCGCCCAGCCCGGGCTCGGGCAGCAGCAGAAGGCGCACCTGGAAGACTACTACTGGA TGACCGGCTACCCGCAGCAGCTGAACCCCGAGGCGCTTCAGCCCCGAGGACGCGGTCGAGGCGCT GCGGCCGGGGCCGTGCCGCCCTCCTTGGGCGGCAGCGAGAGATGGGCCCCGCCGCCGCCGTGG TGTCCGCCGTGATCGCCGCGCCGCCGCGCGCAGAGCGGCGCGGGCCCGCACTACCACCACCACCACCACCA GAGGCGGCGGGGGCGGGGGGGGGGGCCCCTGCACCCGCACCACGCCGCCGCGCGCCTGCACTT CGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGAGCTGAACCGGCAGCTGCGCGGG GTCAGCAAGGAGGAGGTGATCCCGCTGAAGCAGAAGAGGCGGACCCTGAAAAAACCGCGGCTATGCCCAGT CCTGCCGCTTCAAGAGGGTGCAGCAGAGACACGTCCTGGAGTCGGAGAAGAACCAGCTGCTGCAGCAAGT CGACCACCTCAAGCAGGAGATCTCCAGGCTGGTGCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAG TTGGTGAGCAGCGGCTTCCGAGAAAACGGCTCGAGCAGCGACACCCGTCCTCTCCCGAGTTTTTCATAA CTGAGCCCACTCGCAAGTTGGAGCCATCAGTGGGATACGCCACATTTTGGAAGCCCCAGCATCGTGTACT TACCAGTGTGTTCACAAAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC TGGATTACAAGGATGACGACGA TAAG**GTTTAA** 

**Protein Sequence:** 

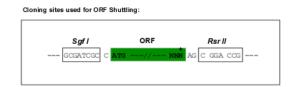
>RC402776 representing NM\_005360 Red=Cloning site Green=Tags(s)

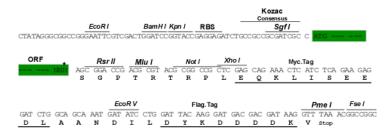
**SGPTRTRRL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Restriction Sites:** Sgfl-Rsrll



### **Cloning Scheme:**





<sup>\*</sup> 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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]