

## Product datasheet for **MR204681**

### **Mafb (NM\_010658) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mafb (NM_010658) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mafb
Synonyms:	kr; Kreisler; Krml; Krml1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204681 representing NM_010658 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCCGCGGAGCTGAGCATGGGGCAAGAGCTGCCACCAGCCCGCTGGCCATGGAGTACGTCAACGACT  
TCGACCTTCTCAAGTTCGACGTGAAGAAGGAGCCCTGGGGCGCGGAGCGTCCGGGCCGGCCATGCAC  
ACGCCTGCAGCCTGCTGGCTCGGTGTCGTCCACCCGCTCAGCACTCCGTGCAGCTCCGTGCCTTCTTCT  
CCCAGCTTCAGTCGACTGAACCGAAGACCCATCTCGAGGACCTGTACTGGATGGCGAGCAACTACCAGC  
AGATGAACCCCGAGGCACTCAACCTGACGCCGAGGACGCGGTGGAGGCGCTCATCGGTTCCGACCCAGT  
GCCCCAGCCGCTGCAGAGCTTCGACGGCTCCGTAGTGCACACCACCATCACCACCACCACCACCCATC  
CCGCACCACGGGTACCCAGGAGCAGGTGTGACTCACGATGACCTGGGCCAGCACGCTCACCCGCACCATC  
ACCATCATACCAAGCGTCGCCCCCGCGTCCAGCGCTGCCAGTCCCGCGCAACAGCTACCCACTAGCCA  
CCCGGGGCCGGGACCGCACGCAACAGCCGCGGCGACGGCTGCGGGCGGCAACGGTAGTGTGGAGGACCGC  
TTCTCTGATGACCAGTGGTGTCCATGTGCGTGCCTGAGCTGAACCGCCACCTGCGGGGCTTACCAAGG  
ACGAGGTGATCCGCCTGAAGCAGAAGCGGCGGACCCCTGAAGAACCGGGGCTACGCCAGCTCGTGCAGGTA  
TAAACGCGTCCAGCAGAAACATCACCTGGAGAACGAGAAGACGACGCTCATTAGCAGGTGGAGCAGCTT  
AAGCAGGAGGTGTCCTGGCTGGCCCGCAGAGAGACGCCTACAAGGTCAAGTCCGAGAACTCGCCAAC  
CCGGCTCAGGGAGGCGGGCTCCACCAGCGACGCCCTCCTCCTGAGTTCTTTCTG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >MR204681 representing NM\_010658  
 Red=Cloning site Green=Tags(s)

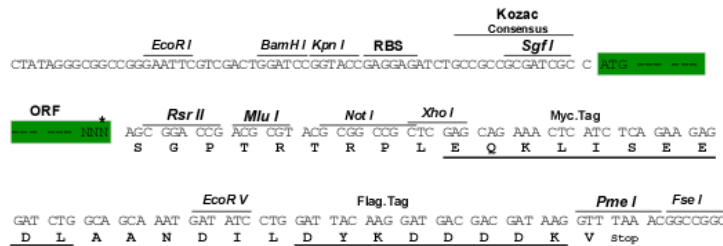
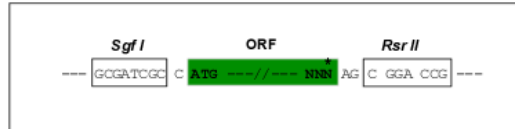
MAAELSMGQELPTSPLAMEYVNDFDLLKFDVKKEPLGRAERPGRPCTRLQPAGSVSSTPLSTPCSSVPSS  
 PSFSPTPEPKTHLEDLYWMASNYQQMNPEALNLPEDAVEALIGSHPVQPQLQSFDFGRSAHHHHHHHHPH  
 PHHGYPGAGVTHDDLQGHAPHHHHHHHQASPPSSAASPAQQLPTSHPGPGPHATAAATAAGNGSVEDR  
 FSDDQLVSMVRELNRHLRGFTKDEVIRLQKQRRTLKNRGYAQSCRYKRIVQKHHLENEKTLIQQVEQL  
 KQEVSLRARERDAYKVKCEKLANSGFREAGSTSDSPSSPEFFL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_010658

**ORF Size:** 969 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.

**RefSeq:** [NM\\_010658.3](#), [NP\\_034788.1](#)

**RefSeq Size:** 3389 bp

**RefSeq ORF:** 972 bp

**Locus ID:** 16658

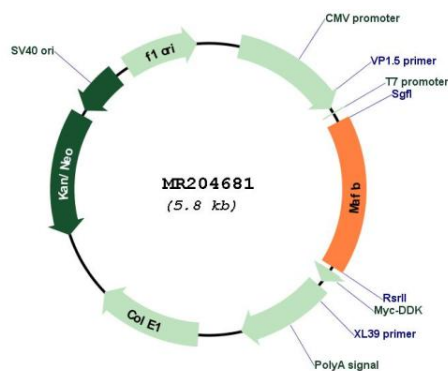
**UniProt ID:** [P54841](#)

**Cytogenetics:** 2 80.92 cM

**MW:** 35.8 kDa

**Gene Summary:** Acts as a transcriptional activator or repressor. Plays a pivotal role in regulating lineage-specific hematopoiesis by repressing ETS1-mediated transcription of erythroid-specific genes in myeloid cells. Required for monocytic, macrophage, osteoclast, podocyte and islet beta cell differentiation. Involved in renal tubule survival and F4/80 maturation. Activates the insulin and glucagon promoters. Together with PAX6, transactivates weakly the glucagon gene promoter through the G1 element. SUMO modification controls its transcriptional activity and ability to specify macrophage fate. Binds element G1 on the glucagon promoter. Involved either as an oncogene or as a tumor suppressor, depending on the cell context. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR204681