

Product datasheet for **MR200346**

Mgp (NM_008597) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mgp (NM_008597) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Mgp
Synonyms: Mg; Mglap
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR200346 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGAGCCTGCTCCCTCTGGCCATCCTGGCTGCGCTGGCCGTGGCAACCCTGTGCTACGAATCTCAG
 AAAGCATGGAGTCTATGAAATCAGTCCCTTCATCAACAGGAGAAATGCCAACACCTTTATGTCCCTCA
 GCAGAGGTGGCGAGCTAAAGCCAAAAGAGAGTCCAGGAACGCAACAAGCCTGCCTACGAGATCAACAGA
 GAGGCCTGCGATGACTACAAGCTGTGTGAGCGCTACGCCATGGTCTACGGCTACAACGCTGCCTACAACC
 GCTACTTCAGGCAGCGCCGAGGAGCCAGATAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR200346 protein sequence
 Red=Cloning site Green=Tags(s)
 MKSLLPLAILAALAVATLCYESHESMESYEISPFINRRNANTFMSPQQRWRAKAQKRVQERNKPAYEINR
 EACDDYKLCERYAMVYGYNAAYNRYFRQRRGARY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_008597

ORF Size: 315 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_008597.1](#), [NM_008597.2](#), [NM_008597.3](#), [NM_008597.4](#), [NP_032623.1](#)

RefSeq Size: 614 bp

RefSeq ORF: 315 bp

Locus ID: 17313

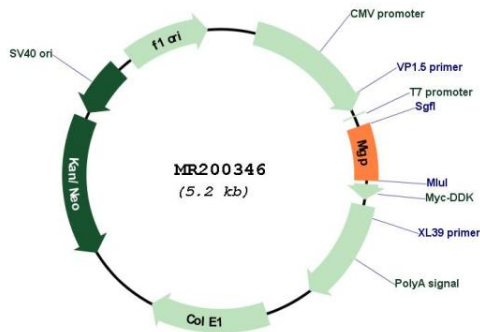
UniProt ID: [P19788](#)

Cytogenetics: 6 G1

MW: 12.4 kDa

Gene Summary: This gene encodes a member of the osteocalcin/matrix Gla family of proteins. The encoded vitamin K-dependent protein is secreted by chondrocytes and vascular smooth muscle cells, and functions as a physiological inhibitor of ectopic tissue calcification. This protein also inhibits angiogenesis. Mice lacking a functional copy of this gene exhibit impaired differentiation of endothelial cells, reduced stature, and calcification and rupture of the vasculature leading to premature death. [provided by RefSeq, Sep 2016]

Product images:



Circular map for MR200346