

## Product datasheet for RC203668

### MRAP2 (NM\_138409) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MRAP2 (NM\_138409) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MRAP2  
**Synonyms:** bA51G5.2; C6orf117  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC203668 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGCCCCAGAGGTTAATTTCTAACAGAACCTCCAGCAATCGGCATCTAATTCTGATTACACCTGGG  
AATATGAATATTATGAGATTGGACCAGTTTCCTTTGAAGGACTGAAGGCTATAAATATTCCATTGTGAT  
TGGATTTGGGTTGGTCTGCAGTCTTCGTGATTTTTATGTTTTTTGTGCTGACCTTGCTGACCAAGACA  
GGAGCCCCACACCAAGACAATGCAGAGTCTCAGAGAAGAGATTCAGAATGAACAGCTTTGTGTCAGACT  
TTGGAAGACCTCTGGAGCCAGATAAAGTATTTTCTCGCCAAGGCAACGAGGAGTCCAGGTCTCTTTCA  
CTGCTACATCAATGAGGTGGAACGCTTGGACAGAGCCAAAGCTTGTACCAGACCACAGCCCTTGACAGT  
GACGTCCAACCTCAGGAAGCCATCAGAAGCAGTGGCAGCCAGAGGAGGAGCTGAACAGGCTCATGAAGT  
TTGACATCCCCAACTTTGTGAACACAGACCAGAACTACTTTGGGGAGGATGATCTTCTGATTTCTGAACC  
ACCTATTGTTCTGGAACTAAGCCACTTCCCAGACCTCACACAAAGACCTGGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203668 protein sequence  
 Red=Cloning site Green=Tags(s)

MSAQRLLISNRTSQQSASNSDYTWEEYEEIGPVSFEGLKAHKYSIVIGFWVLAVFVIFMFFVLTLTKT  
GAPHQDNAESSEKRFMNSFVSDFGRPLEPKVFSRQGNESRSLFHCYINEVERLDRAKACHQTALDS  
DVQLQEAIRSSGQPEEELNRLMKFDIPNFVNTDQNYFGEDDLLISEPPIVLETKPLSQTSHKDL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

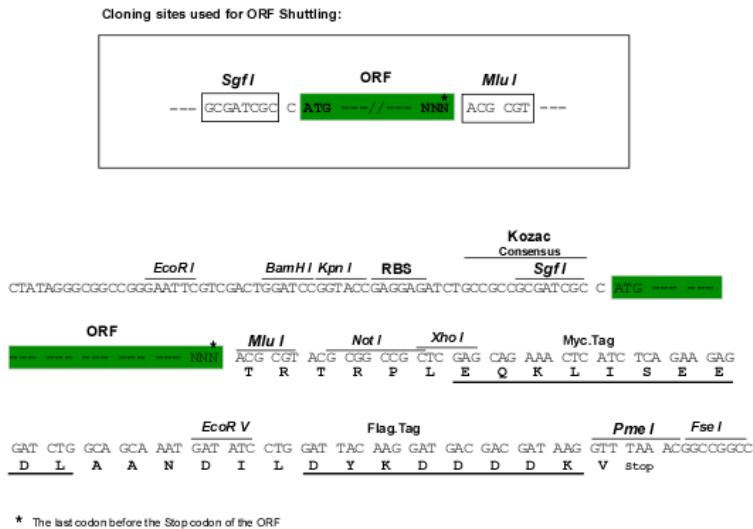


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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6557\\_e10.zip](https://cdn.origene.com/chromatograms/mk6557_e10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_138409

**ORF Size:** 615 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

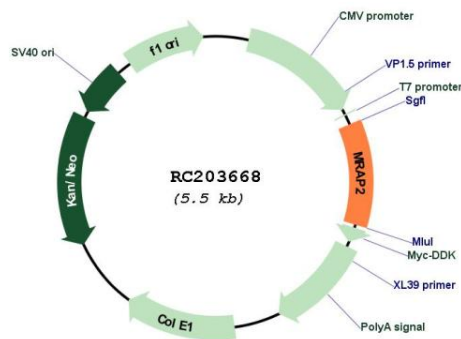
**RefSeq:** [NM\\_138409.4](#)

**RefSeq Size:** 2229 bp

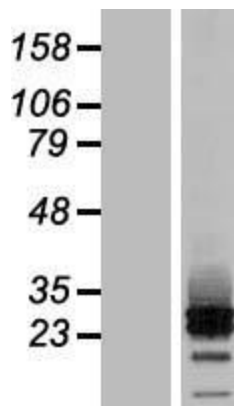
**RefSeq ORF:** 618 bp  
**Locus ID:** 112609  
**UniProt ID:** [Q96G30](#)  
**Cytogenetics:** 6q14.2  
**Protein Families:** Transmembrane  
**MW:** 23.5 kDa

**Gene Summary:** This gene encodes a protein that modulates melanocortin receptor signaling. The encoded protein has been shown to interact with all known melanocortin receptors and may regulate both receptor trafficking and activation in response to ligands. Mice lacking a functional copy of this gene exhibit severe obesity and a mutation in this gene may be associated with severe obesity in human patients. [provided by RefSeq, Oct 2016]

### Product images:



Circular map for RC203668



Western blot validation of overexpression lysate (Cat# [LY408667]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203668 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).