

## Product datasheet for **MC213207**

### Mrap2 (NM\_001101482) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Mrap2 (NM\_001101482) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Mrap2  
**Synonyms:** BB633055  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC213207 representing NM\_001101482  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAGATGTCTGCCAGAGGCTGGCTTCTAACAGGACATCCCCACAGTCACCATCGAACTCTGACTACA  
CCTGGGAATACGAGTACTATGAGATCGGACCAGTTTCCTTTGAAGGACTGAAGGCTCATAAATATCCAT  
TGTGATTGGATTCTGGGTTGGTCTTGCCTCTTTGTGATTTTCATGTTTTTTGTGCTGACTTTGCTGACG  
AAGACAGGTGCCACACCAAGACAACGCGGAGTCCTCAGAGAGGAGGTTCCGCATGAACAGCTTTGTGT  
CAGACTTCGGGAAGCCGCTGGAGTCAGACAAGGTGTTTTCTCGTCAGGGCAACGAGGAGTCCAGGTCTCT  
GTTCCACTGTTACATCAATGAAGTAGAACACTGGACAGGGTTAAAGTTTGCCACCAAACAACAGCCATC  
GACAGTGTGTCACCTCCAGGAAGCCAGCAGAAGCAGTGGGAGGCTGAGGAGGAGCTAGCCAGGTTCA  
TGAAGTTTGACATCCCCAACTTTGTGAACACAGAGCAGAGCTCCTTTGGGAGGATGATCTCCTGATTTCC  
GGAAGCACCCGTTCTTTAGAAAACAAGCCAGTTTCCAGACATCACGCATAGACCTGGACTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001101482  
**Insert Size:** 624 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001101482.2, NP_001094952.2</u>
<b>RefSeq Size:</b>	1948 bp
<b>RefSeq ORF:</b>	624 bp
<b>Locus ID:</b>	244958
<b>UniProt ID:</b>	<u>D3Z1Q2</u>
<b>Cytogenetics:</b>	9 E3.1
<b>Gene Summary:</b>	<p>Modulator of melanocortin receptor 4 (MC4R), a receptor involved in energy homeostasis. Plays a central role in the control of energy homeostasis and body weight regulation by increasing ligand-sensitivity of MC4R and MC4R-mediated generation of cAMP. May also act as a negative regulator of MC2R: competes with MRAP for binding to MC2R and impairs the binding of corticotropin (ACTH) to MC2R. May also regulate activity of other melanocortin receptors (MC1R, MC3R and MC5R); however, additional evidence is required in vivo. [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 through 3 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>