

## Product datasheet for **RC211612**

### **MAL (NM\_022440) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MAL (NM_022440) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAL
Synonyms:	MVP17; VIP17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211612 representing NM_022440 Red=Cloning site Blue=ORF Green=Tags(s)  TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <b>CGATCGCC</b>  ATGGCCCCCGAGCGGCGACGGGGGCAGCACCCCTGCCAGTGGCTTCTCGGTCTTCACCACCTTGCCCG ACTTGCTTTCATCTTTGAGTTTGTGTTCTCCTACATAGCCACTCTGCTCTACGTGGTCCATGCGGTGTT CTCTTTAATCAGATGGAAGTCTCA  <b>ACGCGT</b> ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC211612 representing NM_022440 Red=Cloning site Green=Tags(s)  MAPAAATGGSTLPSGFSVFTLLPDLLFIFEFVFSYIATLLYVVHAVFSLIRWKSS  <b>TR</b> TRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6084_a08.zip">https://cdn.origene.com/chromatograms/mk6084_a08.zip</a>
Restriction Sites:	Sgfl-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_022440

**ORF Size:** 165 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\\_022440.2](#)

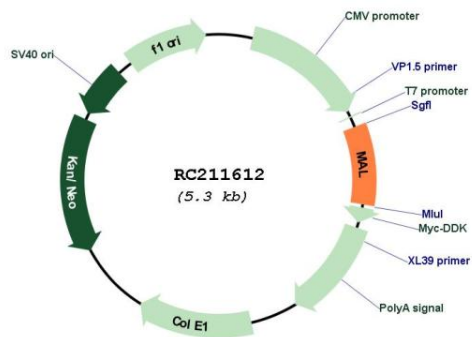
**RefSeq Size:** 762 bp

**RefSeq ORF:** 168 bp

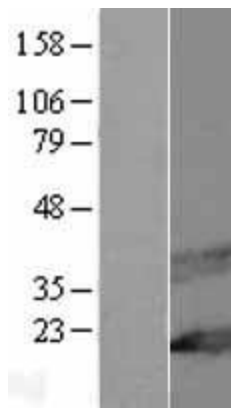
**Locus ID:** 4118  
**UniProt ID:** [P21145](#)  
**Cytogenetics:** 2q11.1  
**Protein Families:** Transmembrane  
**MW:** 5.8 kDa

**Gene Summary:** The protein encoded by this gene is a highly hydrophobic integral membrane protein belonging to the MAL family of proteolipids. The protein has been localized to the endoplasmic reticulum of T-cells and is a candidate linker protein in T-cell signal transduction. In addition, this proteolipid is localized in compact myelin of cells in the nervous system and has been implicated in myelin biogenesis and/or function. The protein plays a role in the formation, stabilization and maintenance of glycosphingolipid-enriched membrane microdomains. Down-regulation of this gene has been associated with a variety of human epithelial malignancies. Alternative splicing produces four transcript variants which vary from each other by the presence or absence of alternatively spliced exons 2 and 3. [provided by RefSeq, May 2012]

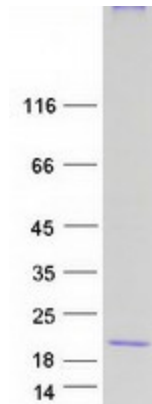
### Product images:



Circular map for RC211612



Western blot validation of overexpression lysate (Cat# [LY411704]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211612 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAL protein (Cat# [TP311612]). The protein was produced from HEK293T cells transfected with MAL cDNA clone (Cat# RC211612) using MegaTran 2.0 (Cat# [TT210002]).