

Product datasheet for RC218524

MAL (NM_022439) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MAL (NM_022439) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: MAL

Synonyms: MVP17; VIP17

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC218524 representing NM_022439

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCCCCGCAGCGGCGACGGGGGGCAGCACCCTGCCCAGTGGCTTCTCGGTCTTCACCACCTTGCCCGACTTGCCCGACTTCTCATCTTTGAGTTTGACGCAGCCTACCACTGCACCGCTGCCCTCTTTTACCTCAGCGCCTCAGTCCTGGAGGCCCTGGCCACCATCACGATGCAAGACGGCTTCACCTACAGGCACTACCATGAAAACATTGCTGCCGTGGTGTTCTCCTACATAGCCACTCTGCTCTACGTGGTCCATGCGGTGTTCTCTTTAATCAGAT

GGAAGTCTTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218524 representing NM_022439

Red=Cloning site Green=Tags(s)

MAPAAATGGSTLPSGFSVFTTLPDLLFIFEFDAAYHCTAALFYLSASVLEALATITMQDGFTYRHYHENI

AAVVFSYIATLLYVVHAVFSLIRWKSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul



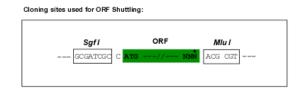
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

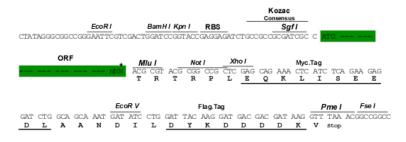
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



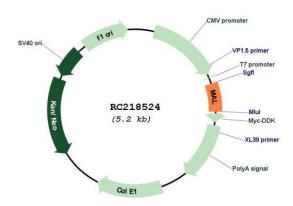
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_022439

ORF Size: 291 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

ORIGENE

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: <u>NM 022439.2</u>, <u>NP 071884.1</u>

 RefSeq Size:
 985 bp

 RefSeq ORF:
 294 bp

 Locus ID:
 4118

 UniProt ID:
 P21145

 Cytogenetics:
 2q11.1

Protein Families: Transmembrane

MW: 10.6 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]