

## Product datasheet for **RC222245**

### Motilin (MLN) (NM\_002418) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Motilin (MLN) (NM\_002418) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Motilin  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC222245 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTATCCCCTAAGGCTGTGGCTGCTCTGCTGGTGGTGCATGCAGCTGCCATGCTGGCCTCCCAGACGG  
AAGCCTTCGTCCCCTATTCACCTATGGCGAACTCCAGAGGATGCAGGAAAAGGAACGGAATAAAGGGCA  
AAAGAAATCCCTGAGTGTATGGCAGAGGTCTGGGAGGAAGGTCTGTAGACCCTGCGGAGCCCATCAGG  
GAAGAAGAAAACGAAATGATCAAGCTGACTGCTCCTCTGGAATGGAATGAGGATGAACTCCAGACAGC  
TGGAAAAGTACCCGGCCACCCTGGAAGGGCTGCTGAGTGAGATGCTTCCCAGCATGCAGCCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC222245 protein sequence  
Red=Cloning site Green=Tags(s)  
MYSRKAVAALLVVHAAAMLASQTEAFVPIFTYGELQRMQEKERNKGQKKSLSVWQRSGEEGPVDPAPPIR  
EEENEMIKLTAPLEIGMRMNSRQLEKYPATLEGLLSEMLPQHAAK

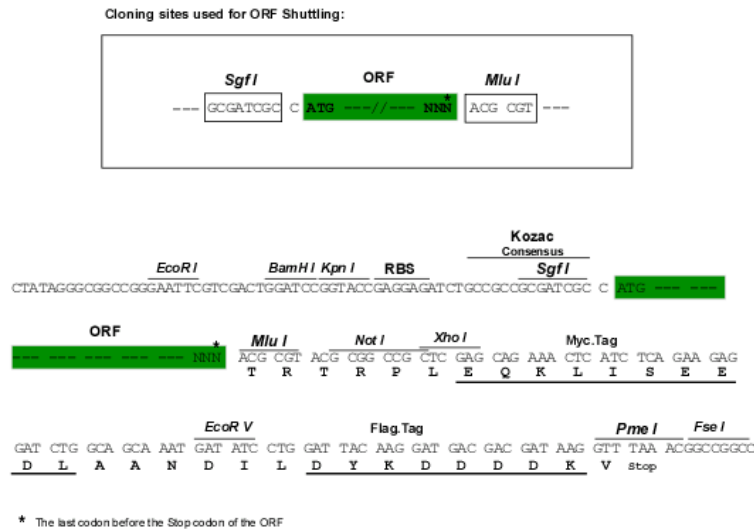
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6473\\_g11.zip](https://cdn.origene.com/chromatograms/mk6473_g11.zip)

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_002418

**ORF Size:** 345 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.

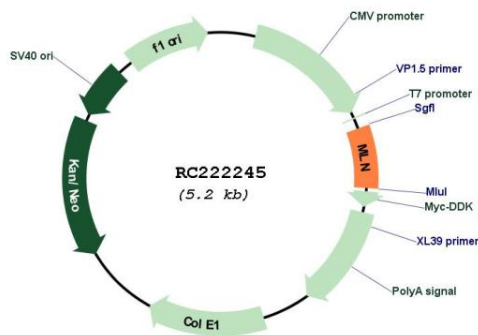
**RefSeq:** [NM\\_002418.3](#)

**RefSeq Size:** 572 bp

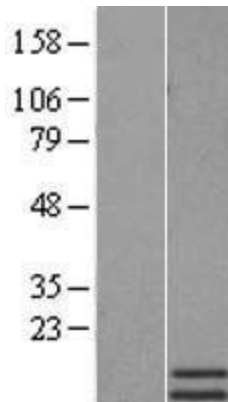
**RefSeq ORF:** 348 bp

**Locus ID:** 4295  
**UniProt ID:** [P12872](#)  
**Cytogenetics:** 6p21.31  
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane  
**MW:** 12.9 kDa  
**Gene Summary:** This gene encodes a small peptide hormone that is secreted by cells of the small intestine to regulate gastrointestinal contractions and motility. Proteolytic processing of the secreted protein produces the mature peptide and a byproduct referred to as motilin-associated peptide (MAP). Three transcript variants encoding different preproprotein isoforms but the same mature peptide have been found for this gene. [provided by RefSeq, May 2010]

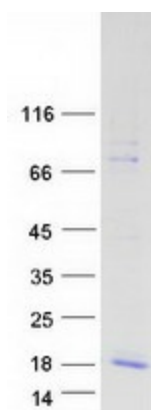
### Product images:



Circular map for RC222245



Western blot validation of overexpression lysate (Cat# [LY419337]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222245 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MLN protein (Cat# [TP322245]). The protein was produced from HEK293T cells transfected with MLN cDNA clone (Cat# RC222245) using MegaTran 2.0 (Cat# [TT210002]).