

## Product datasheet for **SC310916**

### Motilin (MLN) (NM\_001040109) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Motilin (MLN) (NM\_001040109) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Motilin  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >SC310916 representing NM\_001040109.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTATCCCGTAAAGGCTGGCTGCTCTGCTGGTGGTGCATGTAGCTGCCATGCTGGCCTCCCAGACG
GAAGCCTTCGTCCCCCATCTTCACCTATGGCGAACTCCAGAGGATGCAGGAAAAGGAACGGAATAAAGGG
CAAAGAAATCCCTGAGTGTATGGCAGAGGTCTGGGGAGGAAGTCTGTAGACCCTGCGGAGCCCATC
AGGGAAGAAGAAAACGAAATGATCAAGCTGACTGCTCCTCTGGAAATTGGAATGAGGATGAACTCCAGA
CAGCTGGAAAAGTACCCGGCCACCCTGGAAGGGCTGCTGAGTGAGATGCTTCCCCAGCATGCCAAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001040109  
**Insert Size:** 345 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001040109.1](#)

**RefSeq Size:** 569 bp

**RefSeq ORF:** 345 bp

**Locus ID:** 4295

**UniProt ID:** [P12872](#)

**Cytogenetics:** 6p21.31

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**MW:** 12.8 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]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1, resulting in a shorter preproprotein (isoform 2) but not affecting the mature peptide.