

## Product datasheet for **MC228467**

### Arntl (NM\_001243048) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Arntl (NM_001243048) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arntl
Synonyms:	Arnt3; bHLHe5; Bmal1; BMAL1b; bmal1b'; MOP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >MC228467 representing NM\_001243048  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGACCAGAGAATGGACATTTCTCAACCATCAGCGACTTCATGTCTCCGGGCCCCACCGACCTAC  
 TCTCCGGTCCCTGGGCACCAGTGGTGTGGACTGCAATCGCAAGAGGAAAAGGCAGTGCCACTGACTACCA  
 GTTAGAATATGCAGAACCAAGGAAGGATCAAGAATGCAAGGGAGGCCACAGTCAGATTGAAAAGAGG  
 CGTCGGGACAAAAATGAACAGTTTCATTGATGAATTGGCTTCTTTGGTACCAACATGCAATGCAATGTCCA  
 GGAAGTTAGATAAACTCACCGTCTAAGGATGGCTGTTCCAGCACATGAAAACCTTTGAGAGGTGCCACCAA  
 CCCATACACAGAAGCAAACCTACAAGCCAACATTTCTATCAGATGACGAACTGAAACACCTAATTCTCAGG  
 GCAGCAGATGGATTTTTGTTGTCGTAGGATGTGACCGAGGGAAGATCCTTTGTCTCCGAGTCTGTCT  
 TCAAGATCCTCAATTATAGCCAGAATGACCTATTGGCCAGAGCTTGTTGACTACCTGCATCCAAAAGA  
 TATTGCCAAAGTTAAGGAACAGCTATCTTCTCGGACACTGCGCCCCGGGAGCGACTCATTGATGCCAAG  
 ACTGGACTTCCGGTTAAAACGGATATAACCCCTGGGCCCTCCCGCTATGCTCTGGAGCCCAGCCGCTCTT  
 TCTTCTGTAGAATGAAGTGAACAGGCCTTCAGTAAAGGTGGAAGATAAGGACTTCGCCTCTACCTGTTT  
 AAAGAAAAAGCAGATCGAAAAAGCTTCTGCACAATCCACAGCACAGGCTATTTGAAAAGCTGGCCACCC  
 ACGAAGATGGGGCTGGACGAAGACAATGAGCCAGACAACGAGGGCTGCAACCTCAGCTGCCTCGTTGCAA  
 TCGGGCGCCTGCACTCGCACATGGTCCACAACCAGCGAACGGGGAAATACGGGTGAAATCTATGGAGTA  
 CGTTTCTCGACACGCAATAGATGGGAAATTTGTTTTGTAGATCAGAGGGCGACAGCTATTTGGCGTAT  
 CTACCACAGGAACCTTAGGTACATCATGTTATGAGTATTTTCATCAAGACGACATAGGACACCTCGCAG  
 AATGTCACAGGCAAGTTTTACAGACAAGAGAAAAGATCACAACCTAATTGCTATAAGTTTAAAGTCAAAGA  
 TGTTCTTTTTATCACGCTACGAAGTCGATGGTTCAGTTTCATGAACCCGTGGACCAAGGAAGTTGAATAC  
 ATTGTCTCAACCAACTGTTGTTTTAGCCAATGTCCTGGAAGGCGGGACCCAACCTTCCCGCAGCTAA  
 CAGCACCCCCCAGCATGGACAGCATGCTGCCCTCTGGAGAAGGTGGCCCAAAGAGGACTCATCCAC  
 TGTCCCAGGCATTCCAGGGGAACCAGAGCCGGAGCAGGAAAAATAGGTGCAATGATCGCGGAGGAAATC  
 ATGGAAATCCACAGGATAAGAGGGTTCATCGCTTCCAGCTGTGGCTCCAGCCGCTGAACATCACAAGTA  
 CGCCTCCCCTGATGCCTCTTCTCCAGGAGGCAAGAAGATTCTAAATGGAGGGACTCCAGACATTCCTTC  
 CACTGGACTATTACCAGGCAGGCTCAGGAGACCCAGGGTATCCCTATTCTGATAGTTCTTCTATTCTT  
 GGTGAGAACCCACATAGGCATCGATATGATAGATAACGACCAAGGATCAAGTAGTCCCAGTAACGATG  
 AGGCAGCAATGGCTGTATCATGAGCCTCTTGGAAAGCAGATGCGGGGCTGGGTGGCCCCGTTGACTTTAG  
 TGACTTGCCATGGCCGCT**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3462\\_c01.zip](https://cdn.origene.com/chromatograms/ja3462_c01.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001243048

**Insert Size:** 1842 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).

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

<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><a href="#">NM_001243048.1</a></u> , <u><a href="#">NP_001229977.1</a></u>
<b>RefSeq Size:</b>	2628 bp
<b>RefSeq ORF:</b>	1842 bp
<b>Locus ID:</b>	11865
<b>UniProt ID:</b>	<u><a href="#">Q9WTL8</a></u>
<b>Cytogenetics:</b>	7 59.17 cM
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a basic helix-loop-helix protein that forms a heterodimer with Clock. This heterodimer binds E-box enhancer elements upstream of Period (Per1, Per2, Per3) and Cryptochrome (Cry1, Cry2) genes and activates transcription of these genes. Per and Cry proteins heterodimerize and repress their own transcription by interacting in a feedback loop with Clock/Arntl complexes. Defects in this gene have been linked to infertility, problems with gluconeogenesis and lipogenesis, and altered sleep patterns. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2014]</p> <p>Transcript Variant: This variant (2) lacks several in-frame exons in the coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.</p>