

## Product datasheet for **RC217474L4V**

### **BMAL1 (ARNTL) (NM\_001030272) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	BMAL1 (ARNTL) (NM_001030272) Human Tagged ORF Clone Lentiviral Particle
Symbol:	BMAL1
Synonyms:	bHLHe5; BMAL1; BMAL1c; JAP3; MOP3; PASD3; TIC
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001030272
ORF Size:	1875 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC217474).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_001030272.1</a>
RefSeq Size:	2808 bp
RefSeq ORF:	1878 bp
Locus ID:	406
UniProt ID:	<a href="#">O00327</a>
Cytogenetics:	11p15.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Circadian rhythm - mammal



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MW: 68.7 kDa

**Gene Summary:** 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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]