

## Product datasheet for RC204464L3V

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## BMAL1 (ARNTL) (NM 001030273) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** BMAL1 (ARNTL) (NM\_001030273) Human Tagged ORF Clone Lentiviral Particle

Symbol: BMAL1

Synonyms: bHLHe5; BMAL1; BMAL1c; JAP3; MOP3; PASD3; TIC

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001030273

ORF Size: 1749 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC204464).

Sequence:

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.

**RefSeg:** NM 001030273.1

RefSeq Size:2879 bpRefSeq ORF:1749 bpLocus ID:406

UniProt ID: <u>000327</u>

Cytogenetics: 11p15.3

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Circadian rhythm - mammal





**MW:** 64.2 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]