

Product datasheet for **RC217474**

BMAL1 (ARNTL) (NM_001030272) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMAL1 (ARNTL) (NM_001030272) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMAL1
Synonyms:	bHLHe5; BMAL1; BMAL1c; JAP3; MOP3; PASD3; TIC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217474 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGACCAGAGAATGGACATTTCTCAACCATCAGTGATTTTCATGTCCCCGGGCCCCACCGACCTGC
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Protein Sequence:

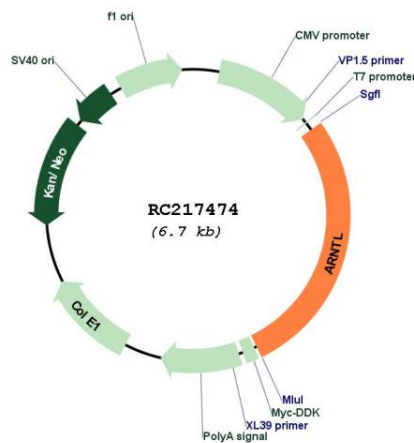
>RC217474 protein sequence
 Red=Cloning site Green=Tags(s)

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 IHSTGYLKSWPPTKMGLDEDNEPDNEGCNL SCLVAIGRLHSHVVPQPVNGEIRVKSMEEYVSRHAIDGKRV
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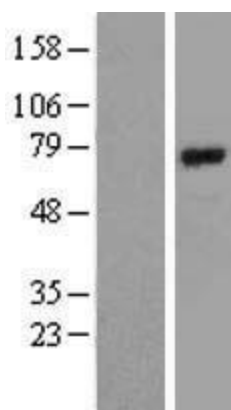
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Locus ID:	406
UniProt ID:	O00327
Cytogenetics:	11p15.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Circadian rhythm - mammal
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]

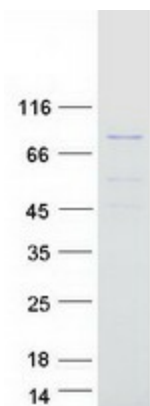
Product images:



Circular map for RC217474



Western blot validation of overexpression lysate (Cat# [LY422246]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217474 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARNTL protein (Cat# [TP317474]). The protein was produced from HEK293T cells transfected with ARNTL cDNA clone (Cat# RC217474) using MegaTran 2.0 (Cat# [TT210002]).