

## **Product datasheet for TP307870**

#### OriGene Technologies, Inc.

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### BMAL1 (ARNTL) (NM\_001178) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human aryl hydrocarbon receptor nuclear translocator-like (ARNTL),

transcript variant 1, 20 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC207870 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MADQRMDISSTISDFMSPGPTDLLSSSLGTSGVDCNRKRKGSSTDYQESMDTDKDDPHGRLEYTEHQGRI KNAREAHSQIEKRRRDKMNSFIDELASLVPTCNAMSRKLDKLTVLRMAVQHMKTLRGATNPYTEANYKPT FLSDDELKHLILRAADGFLFVVGCDRGKILFVSESVFKILNYSQNDLIGQSLFDYLHPKDIAKVKEQLSS SDTAPRERLIDAKTGLPVKTDITPGPSRLCSGARRSFFCRMKCNRPSVKVEDKDFPSTCSKKKDRKSFCT IHSTGYLKSWPPTKMGLDEDNEPDNEGCNLSCLVAIGRLHSHVVPQPVNGEIRVKSMEYVSRHAIDGKFV FVDQRATAILAYLPQELLGTSCYEYFHQDDIGHLAECHRQVLQTREKITTNCYKFKIKDGSFITLRSRWF SFMNPWTKEVEYIVSTNTVVLANVLEGGDPTFPQLTASPHSMDSMLPSGEGGPKRTHPTVPGIPGGTRAG AGKIGRMIAEEIMEIHRIRGSSPSSCGSSPLNITSTPPPDASSPGGKKILNGGTPDIPSSGLLSGQAQEN PGYPYSDSSSILGENPHIGIDMIDNDQGSSSPSNDEAAMAVIMSLLEADAGLGGPVDFSDLPWPL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 68.5 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





#### BMAL1 (ARNTL) (NM\_001178) Human Recombinant Protein - TP307870

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 001169

Locus ID: 406

UniProt ID: <u>000327</u>, <u>A0A140VKD3</u>

RefSeq Size: 2863 Cytogenetics: 11p15.3 RefSeq ORF: 1875

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

**Summary:** The protein encoded by this gene is a basic helix-loop-helix protein that forms a heterodimer

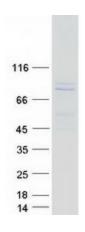
with CLOCK. This heterodimer binds E-box enhancer elements upstream of Period (PER1, PER2, PER3) and Cryptochrome (CRY1, CRY2) genes and activates transcription of these genes. PER and CRY proteins heterodimerize and repress their own transcription by interacting in a feedback loop with CLOCK/ARNTL complexes. 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]

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

**Protein Pathways:** Circadian rhythm - mammal

# **Product images:**



Coomassie blue staining of purified ARNTL protein (Cat# TP307870). The protein was produced from HEK293T cells transfected with ARNTL cDNA clone (Cat# [RC207870]) using MegaTran 2.0 (Cat# [TT210002]).