

Product datasheet for PH317474

OriGene Technologies, Inc.

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BMAL1 (ARNTL) (NM 001030272) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

ARNTL MS Standard C13 and N15-labeled recombinant protein (NP 001025443) **Description:**

Species: Human **HEK293 Expression Host: Expression cDNA Clone**

or AA Sequence:

RC217474

Predicted MW: 68.7 kDa

>RC217474 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MADQRMDISSTISDFMSPGPTDLLSSSLGTSGVDCNRKRKGSSTDYQESMDTDKDDPHGRLEYTEHQGRI KNAREAHSQIEKRRRDKMNSFIDELASLVPTCNAMSRKLDKLTVLRMAVQHMKTLRGATNPYTEANYKPT FLSDDELKHLILRAADGFLFVVGCDRGKILFVSESVFKILNYSQNDLIGQSLFDYLHPKDIAKVKEQLSS SDTAPRERLIDAKTGLPVKTDITPGPSRLCSGARRSFFCRMKCNRPSVKVEDKDFPSTCSKKKDRKSFCT IHSTGYLKSWPPTKMGLDEDNEPDNEGCNLSCLVAIGRLHSHVVPQPVNGEIRVKSMEYVSRHAIDGKFV FVDQRATAILAYLPQELLGTSCYEYFHQDDIGHLAECHRQVLQTREKITTNCYKFKIKDGSFITLRSRWF SFMNPWTKEVEYIVSTNTVVLANVLEGGDPTFPQLTASPHSMDSMLPSGEGGPKRTHPTVPGIPGGTRAG AGKIGRMIAEEIMEIHRIRGSSPSSCGSSPLNITSTPPPDASSPGGKKILNGGTPDIPSSGLLSGQAQEN PGYPYSDSSSILGENPHIGIDMIDNDQGSSSPSNDEAAMAVIMSLLEADAGLGGPVDFSDLPWPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

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

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

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 001025443

RefSeq Size: 2808 RefSeq ORF: 1875





BMAL1 (ARNTL) (NM_001030272) Human Mass Spec Standard - PH317474

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

Locus ID: 406

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

Cytogenetics: 11p15.3

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

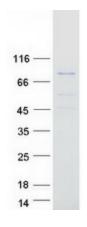
with CLOCK. This heterodimer binds E-box enhancer elements upstream of Period (PER1, PER2, PER3) and Cryptochrome (CRY1, CRY2) genes and activates transcription of these genes. PER and CRY proteins heterodimerize and repress their own transcription by interacting in a feedback loop with CLOCK/ARNTL complexes. 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# [TP317474]). The protein was produced from HEK293T cells transfected with ARNTL cDNA clone (Cat# [RC217474]) using MegaTran 2.0 (Cat# [TT210002]).