

Product datasheet for PH317474

BMAL1 (ARNTL) (NM_001030272) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ARNTL MS Standard C13 and N15-labeled recombinant protein (NP_001025443)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC217474
Predicted MW:	68.7 kDa
Protein Sequence:	>RC217474 protein sequence Red=Cloning site Green=Tags(s)

MADQRMDISSTISDFMSPGPTDLLSSSLGTSGVDCNRKRKGSSTDYQESMDTDKDDPHGRLEYTEHQGRI
KNAREAHSQIEKRRRDKMNSFIDELASLVPTCNAMSRKLDKLTVLRMAVQHMKTLRGATNPYTEANYKPT
FLSDELKHLILRAADGFLFVVGCDRGKILFVSESVFKILNYSQNDLIGQSLFDYLHPKDIKAKVKEQLSS
SDTAPRERLIDAKTGLPVKTDITPGPSRLCSGARRSFFCRMKNRPSVKVEDKDFPSTCSKKKDRKSFCT
IHSTGYLKSWPPTKMGLDEDNEPDNEGCNLSCLVAIGRLHSHVVPQPVNGEIRVKSMEEYVSRHAIDGKFV
FVDQRATAILAYLPQELLGTSCYEYFHQDDIGHLAECHRQVLQTREKITTNCYKFKIKDGSFITLRSWF
SFMNPWTKEVEYIVSTNTVLANVLEGGDPTFPQLTASPHSMDSMLPSGEGGPKRTHPTVPGIPGGTRAG
AGKIGRMIAEEIMEIHRIRGSSPSSCGSSPLNITSTPPPDASSPGGKKILNGGTPDIPSSGLLSGQAQEN
PGYPYDSSSILGENPHIGIDMIDNDQGSSSPSNDEAAMAVIMSLLEADAGLGGPVDFSDLPWPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_001025443
RefSeq Size:	2808
RefSeq ORF:	1875



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

Locus ID: 406

UniProt ID: [O00327](#), [A0A140VKD3](#)

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]).