Recombinant Human ARNTL Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. ARNTL-3938H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	ARNTL MS Standard C13 and N15-labeled recombinant protein (NP_001025444) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	64.2 kDa
AA Sequence	MINIESMDTDKDDPHGRLEYTEHQGRIKNAREAHSQIEKRRRDKMNSFIDELASLVP TCNAMSRKLDKLTVLRMAVQHMKTLRGATNPYTEANYKPTFLSDDELKHLILRAADG FLFVVGCDRGKILFVSESVFKILNYSQNDLIGQSLFDYLHPKDIAKVKEQLSSSDTAPR ERLIDAKTGLPVKTDITPGPSRLCSGARRSFFCRMKCNRPSVKVEDKDFPSTCSKKK ADRKSFCTIHSTGYLKSWPPTKMGLDEDNEPDNEGCNLSCLVAIGRLHSHVVPQPV

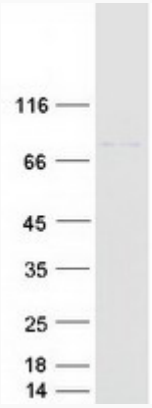
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	NGEIRVKSMEYVSRHAIDGKFVFVDQRATAILAYLPQELLGTSCYEYFHQDDIGHLAE CHRQVLQTREKITTNCYKFKIKDGSFITLRSRWFSFMNPWTKEVEYIVSTNTVVLANV LEGGDPTFPQLTASPHSMDSMLPSGEGGPKRTHPTVPGIPGGTRAGAGKIGRMIAE EIMEIHRIRGSSPSSCGSSPLNITSTPPPDASSPGGKKILNGGTPDIPSSGLLSGQAQ ENPGYPYSDSSSILGENPHIGIDMIDNDQGSSSPSNDEAAMAVIMSLLEADAGLGGP VDFSDLPWPLTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	ARNTL aryl hydrocarbon receptor nuclear translocator-like [Homo sapiens (human)]
Official Symbol	ARNTL
Synonyms	ARNTL; aryl hydrocarbon receptor nuclear translocator-like; aryl hydrocarbon receptor nuclear translocator-like protein 1; bHLHe5; BMAL1; JAP3; MOP3; PASD3; bHLH-PAS protein JAP3; member of PAS protein 3; member of PAS superfamily 3; brain and muscle ARNT-like 1; PAS domain-containing protein 3; ARNT-like protein 1, brain and muscle; basic-helix-loop-helix-PAS orphan MOP3; basic-helix-loop-helix-PAS protein MOP3; class E basic helix-loop-helix protein 5; TIC; BMAL1c; MGC47515;

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Gene ID	406
mRNA Refseq	NM_001030273
Protein Refseq	NP_001025444
MIM	602550
UniProt ID	O00327
SDS-PAGE	

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