



## Rabbit Anti-ARNTL2 antibody

SL11446R

<b>Product Name:</b>	ARNTL2
<b>Chinese Name:</b>	芳香烃受体核转录蛋白样2抗体
<b>Alias:</b>	ARNT L2; ARNTL 2; ARNTL2; ARNTL2 protein; Aryl hydrocarbon receptor nuclear translocator like 2; Aryl hydrocarbon receptor nuclear translocator like protein 2; Aryl hydrocarbon receptor nuclear translocator-like 2; Basic helix loop helix PAS protein MOP9; Basic-helix-loop-helix-PAS protein MOP9; bHLHe6; BMA L2; BMAL 2; BMAL2; Brain and muscle ARNT like 2; Brain and muscle ARNT-like 2; CLIF; CYCLE like factor; CYCLE-like factor; Member of PAS protein 9; MGC124257; MGC149671; MGC149672; MGC158186; MOP 9; MOP9; PASD 9; PASD9; Transcription factor BMAL 2; Transcription factor BMAL2; wu:fj90c09; BMAL2 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	71kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ARNTL2:381-480/636
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**PubMed:**[PubMed](#)

BMAL2 is a 636 amino acid protein that localizes to the nucleus and contains one bHLH (basic helix-loop-helix) domain, one PAC (PAS-associated C-terminal) domain and two PAS (PER-ARNT-SIM) domains. Expressed at high levels in placenta and brain and at lower levels in liver, thymus, heart, lung and kidney, BMAL2 functions as a component of the circadian core oscillator, which includes a variety of proteins that work in tandem to activate the transcription of target genes. More specifically, BMAL2, when functioning as a component of the core oscillator, binds to the E-box element (3'-CACGTG-5') of target DNA, thus inducing transcription. Multiple isoforms of BMAL2 exist due to alternative splicing events.

**Function:**

ARNTL2 (aryl hydrocarbon receptor nuclear translocator-like 2) is a basic Helix-Loop-Helix-Per-Arnt-Sim (bHLH-PAS) transcription factor. ARNTL2-CLOCK heterodimers activate E-box element (3'-CACGTG-5') transcription. Also, in umbilical vein endothelial cells, ARNTL2 activates SERPINE1 through E-box sites. This transactivation is inhibited by PER2 and CRY1. It may participate in circadian clock regulation

**Subunit:**

Component of the circadian core oscillator, which includes the CRY proteins, CLOCK, or NPAS2, ARNTL or ARNTL2, CSNK1D and/or CSNK1E, TIMELESS and the PER proteins. Interacts directly with CLOCK to form the ARNTL2-CLOCK transactivator. Can form heterodimers or homodimers which interact directly with CLOCK to form the transcription activator. Also interacts with NPAS2 and HIF1A.

**Subcellular Location:**

Nuclear

**Tissue Specificity:**

Expressed in fetal brain. Highly expressed in brain and placenta. Lower levels in heart, liver, thymus, kidney and lung. Located to endothelial cells and neuronal cells of the suprachiasmatic nucleus (SCN). Also detected in endothelial cells of the heart, lung and kidney. In the brain, specifically expressed in the thalamus, hippocampus and amygdala.

**Similarity:**

Contains 1 bHLH (basic helix-loop-helix) domain.  
Contains 1 PAC (PAS-associated C-terminal) domain.  
Contains 2 PAS (PER-ARNT-SIM) domains.

**SWISS:**

Q8WYA1

**Gene ID:**

56938

**Product Detail:**

**Database links:**

[Entrez Gene: 56938](#) Human

[Entrez Gene: 373925](#) Chicken

[SwissProt: Q8QGQ7](#) Chicken

[wissProt: Q8WYA1](#) Human

[Unigene: 434269](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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