Datasheet for ABIN7599774

anti-ARNTL antibody (AA 116-447)

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Overview

Quantity:	100 µg
Target:	ARNTL
Binding Specificity:	AA 116-447
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ARNTL antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-BMAL1/ARNTL Antibody Picoband®
Immunogen:	E.coli-derived human BMAL1/ARNTL recombinant protein (Position: R116-E447).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-BMAL1/ARNTL Antibody Picoband® (ABIN7599774). Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	ARNTL
Alternative Name:	ARNTL (ARNTL Products)
Background:	Synonyms: Basic-helix-loop-helix-PAS protein MOP3, Brain and muscle ARNT-like 1, Class E basic helix-loop-helix protein 5, bHLHe5, Member of PAS protein 3, PAS domain-containing protein 3, bHLH-PAS protein JAP3, ARNTL, BHLHE5, BMAL1, MOP3, PASD3 Tissue Specificity: Hair follicles (at protein level). Highly expressed in the adult brain, skeletal muscle and heart. Background: Aryl hydrocarbon receptor nuclear translocator-like protein 1 is protein that in humans is encoded by the ARNTL gene. 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 Weight:	75 kDa
Gene ID:	406
UniProt:	O00327
Pathways:	Regulation of Lipid Metabolism by PPARalpha, Protein targeting to Nucleus, Warburg Effect

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat ELISA, 0.1-0.5 µg/mL, - 1. Hatanaka F, Matsubara C, Myung J, Yoritaka T, Kamimura N, Tsutsumi S, Kanai A, Suzuki Y, Sassone-Corsi P, Aburatani H, Sugano S,Takumi T (Dec 2010). "Genome-wide profiling of the core clock protein BMAL1 targets reveals a strict relationship with metabolism". Molecular and Cellular Biology. 30 (24): 5636-5648. 2. Pappa KI, Gazouli M, Anastasiou E, Iliodromiti Z, Antsaklis A, Anagnou NP (Feb 2013). "The major circadian pacemaker ARNT-like protein-1 (BMAL1) is associated with susceptibility to gestational diabetes mellitus". Diabetes Research and Clinical Practice. 99 (2): 151-7. 3. Richards J, Diaz AN, Gumz ML (Oct 2014). "Clock genes in hypertension: novel insights from rodent models". Blood Pressure Monitoring. 19 (5): 249-54.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.