

Datasheet for ABIN6942287 **anti-ARNTL antibody**



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Overview

Quantity:	100 µL
Target:	ARNTL
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This ARNTL antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc))

Product Details

Immunogen:	C terminal human BMAL1
Clone:	2B10
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	ARNTL
Alternative Name:	BMAL1 (ARNTL Products)
Background:	Synonyms: ARNTL, Aryl hydrocarbon receptor nuclear translocator-like protein 1, Basic-helix-loop-helix-PAS protein MOP3, Brain and muscle ARNT-like 1, Class E basic helix-loop-helix

Target Details

protein 5, Member of PAS protein 3, PAS domain-containing protein 3, bHLH-PAS protein JAP3, bHLHe5, BHLHE5, BMAL1, MOP3, PASD3.

Background: Transcriptional activator which forms a core component of the circadian clock. Transcription factors, CLOCK or NPAS2 and ARNTL/BMAL1 or ARNTL2/BMAL2, form the positive limb of the feedback loop, act in the form of a heterodimer and activate the transcription of core clock genes and clock-controlled genes (involved in key metabolic processes), harboring E-box elements (5'-CACGTG-3') within their promoters. The core clock genes: PER1/2/3 and CRY1/2 which are transcriptional repressors form the negative limb of the feedback loop and interact with the CLOCK|NPAS2-ARNTL/BMAL1|ARNTL2/BMAL2 heterodimer inhibiting its activity and thereby negatively regulating their own expression. This heterodimer also activates nuclear receptors NR1D1/2 and RORA/B/G, which form a second feedback loop and which activate and repress ARNTL/BMAL1 transcription, respectively. ARNTL/BMAL1 positively regulates myogenesis and negatively regulates adipogenesis via the transcriptional control of the genes of the canonical Wnt signaling pathway.

Gene ID:	406
UniProt:	O00327
Pathways:	Regulation of Lipid Metabolism by PPARalpha , Protein targeting to Nucleus , Warburg Effect

Application Details

Application Notes:	WB 1:300-5000 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 1xTBS (pH 7.4), 1 % BSA, 40 %Glycerol and 0.05 % Sodium Azide.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months