

**DATASHEET**

**BMAL1 Rabbit Monoclonal Antibody(C2026)**

CAT. NO. AMA01638

**KEY FEATURES**

Target	BMAL1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, IP	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.	Storage	at-20°C

**BACKGROUND**

Transcriptional activator which forms a core component of the circadian clock. The circadian clock, an internal time-keeping system, regulates various physiological processes through the generation of approximately 24 hour circadian rhythms in gene expression, which are translated into rhythms in metabolism and behavior. It is derived from the Latin roots 'circa' (about) and 'diem' (day) and acts as an important regulator of a wide array of physiological functions including metabolism, sleep, body temperature, blood pressure, endocrine, immune, cardiovascular, and renal function. Consists of two major components: the central clock, residing in the suprachiasmatic nucleus (SCN) of the brain, and the peripheral clocks that are present in nearly every tissue and organ system.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	1:10 - 1:50

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Recombinant rabbit monoclonal antibody to BMAL1
Specificity	Recognizes endogenous levels of BMAL1 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human BMAL1 protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 25; Observed: 78 kD
Form/Buffer	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Alternative Names	BHLHE5; BMAL1; MOP3; PASD3; 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 protein 5; bHLHe5; Member of PAS protein 3; PAS domain-containing protein 3; bHLH-PAS protein JAP3
Gene Symbol	ARNTL
Entrez Gene	406(Human); 11865(Mouse); 29657(Rat)
SwissProt	O00327(Human); Q9WTL8(Mouse); Q9EPW1(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

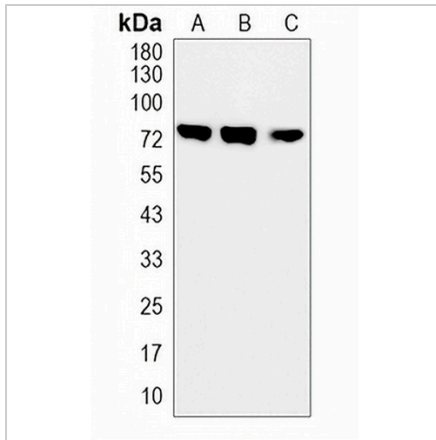
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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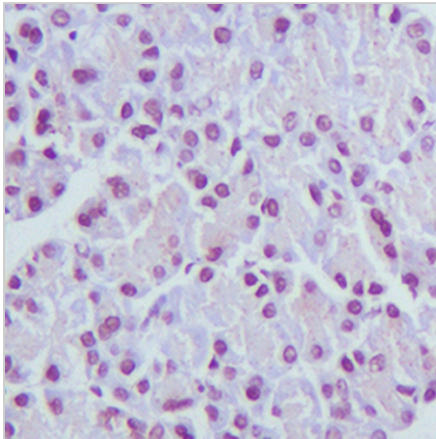
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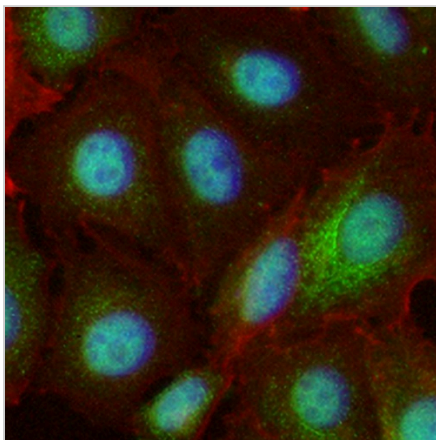
**DATA**



Western blot analysis of BMAL1 expression in SHSY5Y (A), mouse brain (B), rat brain (C) whole cell lysates. (Predicted band size: 25; 55; 34; 59; 64; 69 kD; Observed band size: 78 kD)



Immunohistochemical analysis of BMAL1 staining in human pancreas formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of BMAL1 staining in HEK293 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.