

**Datasheet for 600-101-ML8****BMAL1 Antibody****Overview**

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Description:</b>  | Anti-BMAL1 (GOAT) Antibody - 600-101-ML8 |
| <b>Item No.:</b>     | 600-101-ML8                              |
| <b>Size:</b>         | 100 µg                                   |
| <b>Applications:</b> | IF, WB                                   |
| <b>Reactivity:</b>   | Human, Mouse                             |
| <b>Host Species:</b> | Goat                                     |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Arntl (Aryl Hydrocarbon Receptor Nuclear Translocator Like), also known as Bmal1, 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, Angelman Syndrome and altered circadian rhythm. Anti-Bmal1 Antibody is useful for researchers interested in Neuroscience research. |
| <b>Synonyms:</b>     | Goat Anti-Aryl hydrocarbon receptor nuclear translocator-like protein 1 Antibody, Goat Anti-Bmal1 Antibody, Arnt3, Brain and muscle ARNT-like 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | ARNTL              |
| <b>Reactivity:</b>     | Human, Mouse       |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Immunogen:</b>          | Anti-BMAL1 antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to a N-terminal portion of human Bmal1 conjugated to Keyhole Limpet Hemocyanin (KLH).                                                                                                                                                                           |
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against human Bmal1. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse, rat, golden hamster, horse, gallus gallus, Pongo abelii, Tyto alba, and Nannospalax galili. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - O00327</a></li><li>• <a href="#">NCBI - NP_001025443.1</a></li><li>• <a href="#">GeneID - 406</a></li><li>• <a href="#">UniProtKB - Q9WTL8</a></li></ul>                                                                                                                                                                         |

## Application Details

|                             |                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | IF, WB                                                                                                                                                                                                                  |
| <b>Application Note:</b>    | Anti-BMAL1 Antibody has been tested in WB and IF. Expect a band at ~67-69 kDa in western blot using appropriate lysates. Positive control used: HEK293T and Mouse Brain whole cell lysates in WB, and HeLa cells in IF. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                         |
| <b>ELISA:</b>               | 1:10,000-1:50,000                                                                                                                                                                                                       |
| <b>IF:</b>                  | 15 µg/ml                                                                                                                                                                                                                |
| <b>WB:</b>                  | 1:1,000                                                                                                                                                                                                                 |
| <b>Other:</b>               | User Optimized                                                                                                                                                                                                          |

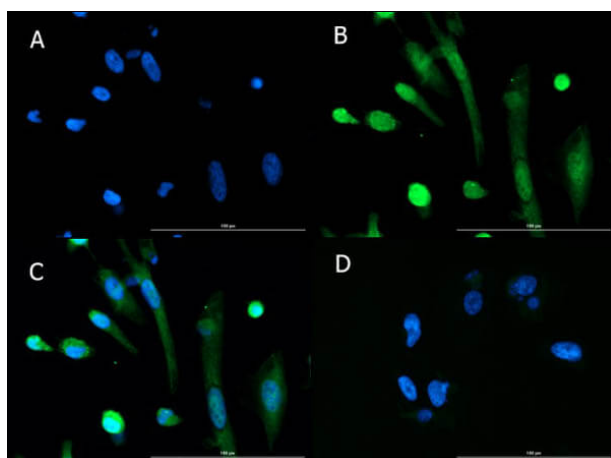
## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 0.92 mg/ml by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

## Shipping & Handling

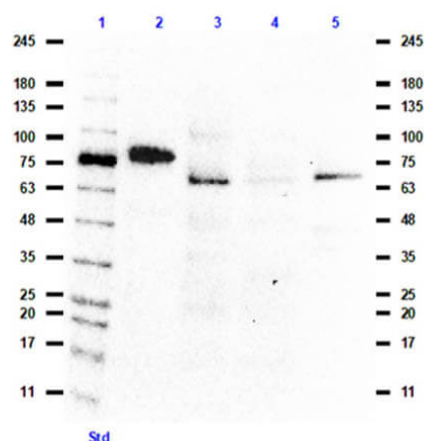
|                            |                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

## Images



### Immunofluorescence Microscopy

Immunofluorescence of Goat anti-BMAL1 Antibody. Cell Line: HeLa Cells. Fixative: 4%PFA. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-BMAL1 at 15µg/mL overnight at 2-8°C. Secondary antibody: Donkey Anti-Goat IgG DyLight™488 (p/n 605-741-125) at 15µg/mL at RT for 1 hr. Nuclear Counterstain: DAPI. Image Staining: (A) DAPI. (B) Anit-BMAL1 + secondary. (C) merge A+B. (D) secondary only.



### Western Blot

Western Blot of Goat Anti-BMAL1 Antibody. Lane 1: Opal PreStained Molecular Weight Marker (p/n MB-210-0500). Lane 2: BMAL1/ARNTL HEK293T OverExpressing Lysate c-myc/DDK tag\* [+]. Lane 3: HEK293T empty vector lysate [+]. Lane 4: NIH3T3 Lysate (p/n W10-000-358). Lane 5: Mouse Brain Lysate (p/n W10-000-T004). Primary Antibody: Anti-BMAL1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Donkey Anti-Goat IgG HRP (p/n 605-703-125) at 1:40,000 for 30 min at RT. Buffer: 5% BLOTTO (p/n B501-0500). Predicted/observed: overexpressing 76kDa, endogenous ~67-69kDa.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.