

BMAL1 Recombinant Rabbit mAb

Catalog Number: bsm-54102R

Target Protein: BMAL1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:400-800), IF (1:50-200), Flow-Cyt (1:100), ICC/IF (1:50-200)

Reactivity: Human, Mouse (predicted:Rat)

Predicted MW: 69 kDa

Entrez Gene: 406

Swiss Prot: O00327

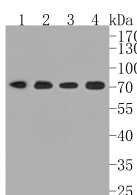
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

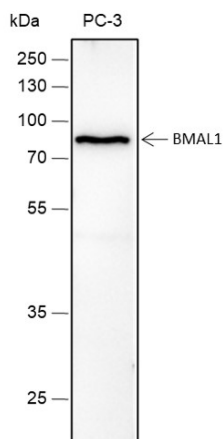
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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. The protein regulates interferon-stimulated gene expression and is an important factor in viral infection, including COVID-19. [provided by RefSeq, Oct 2021]

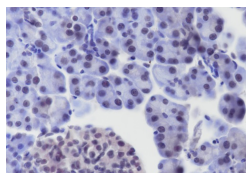
VALIDATION IMAGES



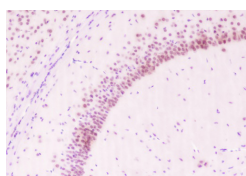
Western blot analysis of BMAL1 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (bsm-54102R, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature. Positive control: Lane 1: Hela cell lysate Lane 2: NIH/3T3 cell lysate Lane 3: Rat brain tissue lysate Lane 4: Mouse spleen tissue lysate



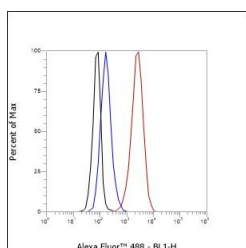
Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:2000 Primary ab incubation condition: 2 hours at room temperature Secondary ab: Goat Anti-Rabbit IgG H&L (HRP) Lysate: PC-3 Protein loading quantity: 20 µg Exposure time: 60 s Predicted MW: 68 kDa Observed MW: 75 kDa



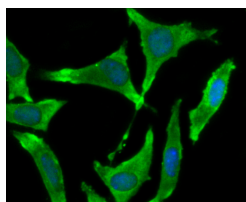
Tissue: Mouse pancreas Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for bsm-54102R



Tissue: Mouse hippocampus Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for bsm-54102R



Cell line: SH-SY5Y Fixation: 4% Paraformaldehyde Permeabilization: 90% Methanol Primary Ab dilution: 1:100 Secondary Ab: Goat Anti-Rabbit IgG Unlabelled control: The cell without incubation with primary antibody and secondary antibody (Black line). Isotype control: Rabbit monoclonal IgG (Blue line). Comment: Line red is the positive signal for bsm-54102R



ICC staining of BMAL1 in HeLa cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-54102R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue)..

PRODUCT SPECIFIC PUBLICATIONS

[IF=5.5] Yujie Hu. et al. Melatonin attenuates chronic sleep deprivation-induced cognitive deficits and HDAC3-Bmal1/clock interruption. CNS NEUROSCI THER. 2023 Sep; WB ; Rat . 37721401