bsm-54050R **[Primary Antibody]**

CLOCK Recombinant Rabbit mAb

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DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 3F9
GeneID: 9575
SWISS: O15516
Target: CLOCK
Immunogen: A synthesized peptide derived from human CLOCK: 145-180.
Purification: affinity purified by Protein A
Concentration: 1mg/ml
Storage: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.02% Proclin300.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The protein encoded by this gene plays a central role in the regulation of circadian rhythms. The protein encodes a transcription factor of the basic helix-loop-helix (bHLH) family and contains DNA binding histone acetyltransferase activity. The encoded protein forms a heterodimer with ARNTL (BMAL1) that 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. Polymorphisms in this gene may be associated with behavioral changes in certain populations and with obesity and metabolic syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

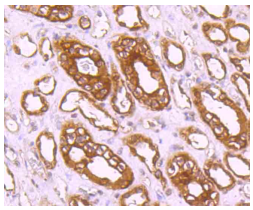
Applications:
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1:50-100)
ICC/IF (1:50-200)

Reactivity: Human, Mouse, Rat

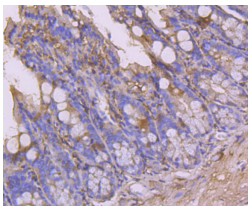
Predicted MW.: 95 kDa

Subcellular Location: Cytoplasm ,Nucleus

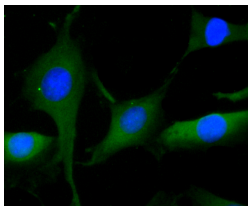
VALIDATION IMAGES



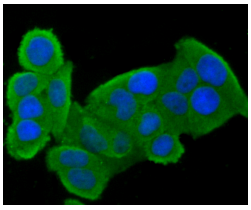
Paraformaldehyde-fixed, paraffin embedded (human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CLOCK) Monoclonal Antibody, Unconjugated (bsm-54050R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023)instructionsand DAB staining.



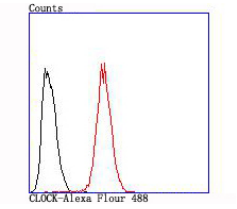
Paraformaldehyde-fixed, paraffin embedded (human colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CLOCK) Monoclonal Antibody, Unconjugated (bsm-54050R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023)instructionsand DAB staining.



ICC staining of CLOCK in SHG-44 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-54050R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



ICC staining of CLOCK 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 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-54050R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



Flow cytometric analysis of CLOCK was done on Hela cells. The cells were fixed, permeabilized and stained with the primary antibody (bsm-54050R, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG Secondary antibody at 1/1,000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).