Product Name: KD-Validated BMAL1 Mouse Monoclonal Antibody
Catalog #: KVAb00702
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 68.8kDa

Antigen Information

Gene Name	BMAL1
Alternative Names	BMAL1; Basic Helix-Loop-Helix ARNT Like 1; BHLHe5; PASD3; MOP3; Brain And Muscle ARNT-Like 1; ARNTL1; ARNTL; JAP3; Aryl Hydrocarbon Receptor Nuclear Translocator-Like Protein 1; Aryl Hydrocarbon Receptor Nuclear Translocator Like; Basic Helix-Loop-Helix ARNT-Like Protein 1; Class E Basic Helix-Loop-Helix Protein 5; Basic Helix-Loop-Helix Family Member E5; Basic-Helix-Loop-Helix-PAS Protein MOP3; PAS Domain-Containing Protein 3; Member Of PAS Superfamily 3; PAS Domain Containing 3; Member Of PAS Protein 3; BHLH-PAS Protein JAP3; Mutant Basic Helix-Loop-Helix ARNT-Like Protein 1; Testis Tissue Sperm-Binding Protein Li 50e; Basic-Helix-Loop-Helix-PAS Orphan MOP3; ARNT-Like Protein 1, Brain And Muscle; BMAL1c; BHLHE5; TIC
Gene ID	406.0

SwissProt ID	O00327
Immunogen	Recombinant protein of human ARNTL

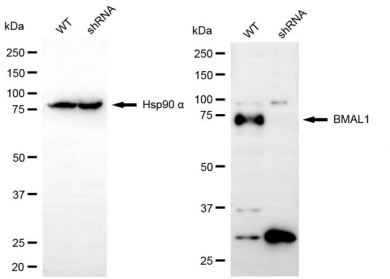
Background

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]

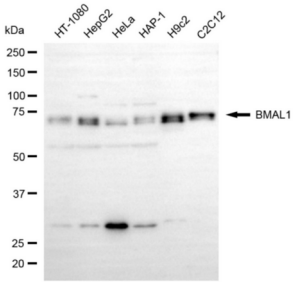
Research Area

Cancer,Cardiovascular,Metabolism,Neuroscience

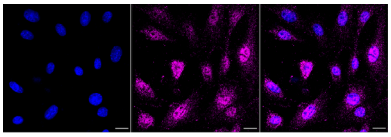
Image Data



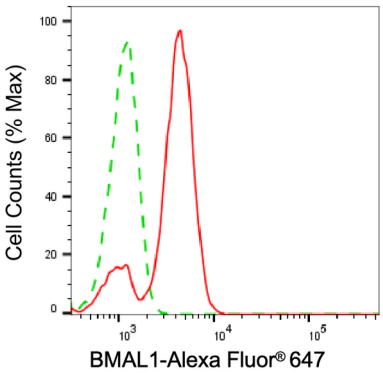
Western blotting analysis using BMAL1 antibody (KVAb00702). BMAL1 expression in wild type (WT) and BMAL1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with BMAL1 antibody (KVAb00702, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using BMAL1 antibody (KVAb00702). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with BMAL1 antibody (KVAb00702, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of C2C12 cells with BMAL1 antibody (KVAb00702, 1:1,000) . Nuclei were stained blue with DAPI;BMAL1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of BMAL1 expression in C2C12 cells using BMAL1 antibody (KVAb00702, 1:2,000). Green, isotype control; red, BMAL1.