SANTA CRUZ BIOTECHNOLOGY, INC.

BMAL2 (K-12): sc-109217



BACKGROUND

BMAL2, also known as ARNTL2 (aryl hydrocarbon receptor nuclear translocator-like 2), MOP9, CLIF or PASD9, is a 636 amino acid protein that localizes to the nucleus and contains one bHLH (basic helix-loop-helix) domain, one PAC (PAS-associated C-terminal) domain and two PAS (PER-ARNT-SIM) domains. Expressed at high levels in placenta and brain and at lower levels in liver, thymus, heart, lung and kidney, BMAL2 functions as a component of the circadian core oscillator, which includes a variety of proteins that work in tandem to activate the transcription of target genes. More specifically, BMAL2, when functioning as a component of the core oscillator, binds to the E-box element (3'-CACGTG-5') of target DNA, thus inducing transcription. Multiple isoforms of BMAL2 exist due to alternative splicing events.

REFERENCES

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- Maemura, K., de la Monte, S.M., Chin, M.T., Layne, M.D., Hsieh, C.M., Yet, S.F., Perrella, M.A. and Lee, M.E. 2000. CLIF, a novel cycle-like factor, regulates the circadian oscillation of plasminogen activator inhibitor-1 gene expression. J. Biol. Chem. 275: 36847-36851.
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CHROMOSOMAL LOCATION

Genetic locus: ARNTL2 (human) mapping to 12p11.23.

SOURCE

BMAL2 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BMAL2 of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109217 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-109217 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BMAL2 (K-12) is recommended for detection of BMAL2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

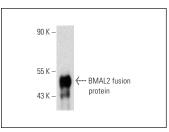
Suitable for use as control antibody for BMAL2 siRNA (h): sc-95746, BMAL2 shRNA Plasmid (h): sc-95746-SH and BMAL2 shRNA (h) Lentiviral Particles: sc-95746-V.

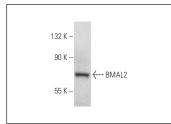
BMAL2 (K-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BMAL2: 71 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or JAR cell lysate: sc-2276.

DATA





BMAL2 (K-12): sc-109217. Western blot analysis of BMAL2 expression in MCF7 whole cell lysate.

BMAL2 (K-12): sc-109217. Western blot analysis of human recombinant BMAL2 fusion protein.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **BMAL2 (C-7): sc-376287** or **BMAL2 (C-11): sc-365469**, our highly recommended monoclonal alternatives to BMAL2 (K-12).