

BMAL2 (M-52): sc-98377

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.

CHROMOSOMAL LOCATION

Genetic locus: ARNTL2 (human) mapping to 12p11.23; Arntl2 (mouse) mapping to 6 G3.

SOURCE

BMAL2 (M-52) is a rabbit polyclonal antibody raised against amino acids 417-468 mapping near the C-terminus of BMAL2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG 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-98377 X, 200 µg/0.1 ml.

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.

APPLICATIONS

BMAL2 (M-52) is recommended for detection of BMAL2 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 siRNA (m): sc-141718, BMAL2 shRNA Plasmid (h): sc-95746-SH, BMAL2 shRNA Plasmid (m): sc-141718-SH, BMAL2 shRNA (h) Lentiviral Particles: sc-95746-V and BMAL2 shRNA (m) Lentiviral Particles: sc-141718-V.

BMAL2 (M-52) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

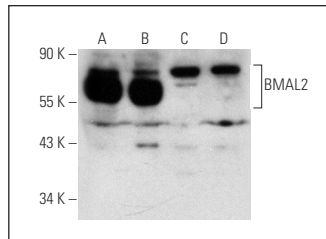
Molecular Weight of BMAL2: 71 kDa.

Positive Controls: mouse placenta extract: sc-364247, JAR cell lysate: sc-2276 or MCF7 whole cell lysate: sc-2206.

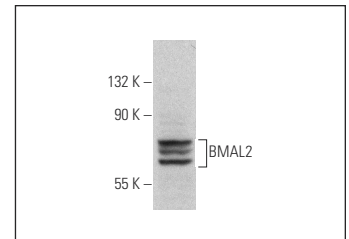
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



BMAL2 (M-52): sc-98377. Western blot analysis of BMAL2 expression in mouse placenta (A) and rat placenta (B) tissue extracts and JAR (C) and JEG-3 (D) whole cell lysates.



BMAL2 (M-52): sc-98377. Western blot analysis of BMAL2 expression in MCF7 whole cell lysate.

PROTOCOLS

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



Try **BMAL2 (C-7): sc-376287** or **BMAL2 (C-11): sc-365469**, our highly recommended monoclonal alternatives to BMAL2 (M-52).