

# BMAL2 (S-14): sc-109219

## 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 2 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 (S-14) 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 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-109219 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-109219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

BMAL2 (S-14) is recommended for detection of BMAL2 of mouse, rat and 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).

BMAL2 (S-14) is also recommended for detection of BMAL2 in additional species, including canine, porcine and avian.

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 (S-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

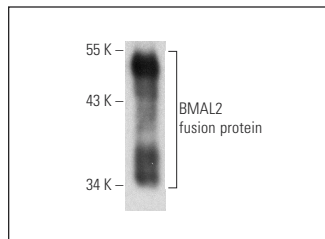
Molecular Weight of BMAL2: 71 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



BMAL2 (S-14): sc-109219. 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://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 (S-14).