

# CREB3L4 (K-17): sc-54796

## BACKGROUND

cAMP responsive element-binding protein 3-L4 (CREB3L4), also known as AlbZIP, is a transcriptional activator that binds to DNA and is thought to be involved in the unfolded protein response. Expressed primarily in luminal epithelial cells of the prostate, as well as in breast and skeletal tissue, CREB3L4 binds as a dimer to the UPR element (UPRE) of DNA where it activates transcription. Induction of CREB3L4 is regulated by androgens, compounds found in males which, when present in high amounts, signal overexpression of CREB3L4. High levels of stress in the endoplasmic reticulum (ER) trigger the release and translocation of the N-terminal domain of CREB3L4 from the ER membrane to the nucleus, allowing the protein to access the DNA and activate transcription. Increased levels of CREB3L4 are found in prostatic cancers, suggesting a possible role in tumor formation.

## CHROMOSOMAL LOCATION

Genetic locus: CREB3L4 (human) mapping to 1q21.3; Creb3l4 (mouse) mapping to 3 F1.

## SOURCE

CREB3L4 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CREB3L4 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-54796 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-54796 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

CREB3L4 (K-17) is recommended for detection of CREB3L4 of mouse 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).

Suitable for use as control antibody for CREB3L4 siRNA (h): sc-62158, CREB3L4 siRNA (m): sc-62159, CREB3L4 shRNA Plasmid (h): sc-62158-SH, CREB3L4 shRNA Plasmid (m): sc-62159-SH, CREB3L4 shRNA (h) Lentiviral Particles: sc-62158-V and CREB3L4 shRNA (m) Lentiviral Particles: sc-62159-V.

CREB3L4 (K-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

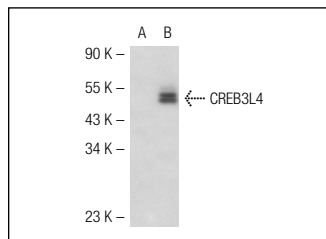
Molecular Weight of CREB3L4: 43 kDa.

Positive Controls: CREB3L4 (h): 293T Lysate: sc-115476.

## 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



CREB3L4 (K-17): sc-54796. Western blot analysis of CREB3L4 expression in non-transfected: sc-117752 (A) and human CREB3L4 transfected: sc-115476 (B) 293T whole cell lysates.

## 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 **CREB3L4 (D-8): sc-514052** or **CREB3L4 (C-11): sc-390842**, our highly recommended monoclonal alternatives to CREB3L4 (K-17).