SANTA CRUZ BIOTECHNOLOGY, INC.

# CREST (M-15): sc-50912

## BACKGROUND

The calcium-responsive transactivator (CREST, SS18L1) protein localizes to nuclear bodies and is required for the normal development of neuronal dendritic trees. CREST contains a multifunctional domain (MFD), which mediates transcription transactivation, nuclear body targeting and dimerization. CREST interacts with adenosine 3', 5'-monophosphate (cAMP) response element-binding protein (CREB)-binding protein (CBP) to regulate neuronal morphogenesis. CREST exhibits ubiquitous expression, with lowest levels observed in the spleen. Mice with a targeted disruption of the Ss18l1 (CREST) gene are viable despite defects in cortical and hippocampal dendrite development. Cortical neurons from CREST-mutant mice are compromised in calcium-dependent dendritic growth, which leads to the conclusion that calcium activation of CREST-mediated transcription helps regulate neuronal morphogenesis.

## REFERENCES


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2. de Bruijn, D.R., Kater-Baats, E., Eleveld, M., Merkx, G. and Geurts Van Kessel, A. 2001. Mapping and characterization of the mouse and human SS18 genes, two human SS18-like genes and a mouse Ss18 pseudogene. Cytogenet. Cell Genet. 92: 310-319.
3. Storlazzi, C.T., Mertens, F., Mandahl, N., Gisselsson, D., Isaksson, M., Gustafson, P., Domanski, H.A. and Panagopoulos, I. 2003. A novel fusion gene, SS18L1/SSX1, in synovial sarcoma. Genes Chromosomes Cancer 37: 195-200.
4. Aizawa, H., Hu, S.C., Bobb, K., Balakrishnan, K., Ince, G., Gurevich, I., Cowan, M. and Ghosh, A. 2004. Dendrite development regulated by CREST, a calcium-regulated transcriptional activator. Science 303: 197-202.


## CHROMOSOMAL LOCATION

Genetic locus: SS18L1 (human) mapping to 20q13.33; Ss18l1 (mouse) mapping to 2 H4.

## SOURCE

CREST (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CREST 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.

Blocking peptide available for competition studies, sc-50912 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CREST (M-15) is recommended for detection of CREST 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 CREST siRNA (h): sc-60441, CREST siRNA (m): sc-60442, CREST shRNA Plasmid (h): sc-60441-SH, CREST shRNA Plasmid (m): sc-60442-SH, CREST shRNA (h) Lentiviral Particles: sc-60441-V and CREST shRNA (m) Lentiviral Particles: sc-60442-V.

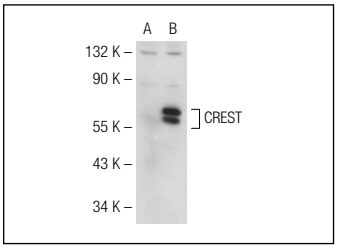
Molecular Weight of CREST: 55 kDa.

Positive Controls: CREST (h): 293T Lysate: sc-170204.

## 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




CREST (M-15): sc-50912. Western blot analysis of CREST expression in non-transfected: sc-117752 (**A**) and human CREST transfected: sc-170204 (**B**) 293T whole cell lysates.

## 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.