

# CREST (A-16): sc-50909

## 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

- Ishikawa, K., Nagase, T., Suyama, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1998. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. *DNA Res.* 5: 169-176.
- de Bruijn, D.R., Kater-Baats, E., Eleveld, M., Merx, 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.
- 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.
- 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 20q13.3.

## SOURCE

CREST (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CREST 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.

Blocking peptide available for competition studies, sc-50909 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 (A-16) is recommended for detection of CREST of 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 shRNA Plasmid (h): sc-60441-SH and CREST shRNA (h) Lentiviral Particles: sc-60441-V.

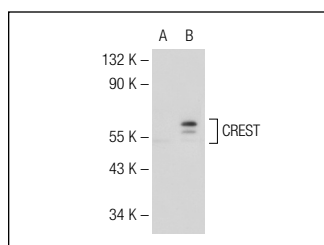
Molecular Weight of CREST: 55 kDa.

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 (A-16): sc-50909. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.