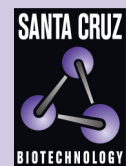


SRCAP (C-13): sc-133310



The Power to Question

BACKGROUND

SRCAP (Snf2-related CREBBP activator protein), also known as EAF1, SWR1, or DOMO1, is a 3,230 amino acid protein that belongs to a family of helicases and contains one HSA domain, one helicase C-terminal domain, one helicase ATP-binding domain and 3 A.T hook DNA-binding domains. Localized to the nucleus, SRCAP functions as a catalytic component of the SRCAP complex, a multi-protein structure that mediates the ATP-dependent exchange of histone dimers for nucleosomal histones, an event that regulates the transcription of select genes via chromatin remodeling. Additionally, the SRCAP complex acts as a coactivator for steroid receptor-mediated transcription, notch-mediated transcription and CREB-mediated transcription. SRCAP is expressed as multiple alternatively spliced isoforms and is subject to DNA damage-dependent phosphorylation by ATM or ATR.

REFERENCES

1. Johnston, H., Kneer, J., Chackalaparampil, I., Yaciuk, P. and Chrivia, J. 1999. Identification of a novel SNF2/SWIZ protein family member, SRCAP, which interacts with CREB-binding protein. *J. Biol. Chem.* 274: 16370-16376.
2. Xu, X., Chackalaparampil, I., Monroy, M.A., Cannella, M.T., Pesek, E., Chrivia, J. and Yaciuk, P. 2001. Adenovirus DNA binding protein interacts with the SNF2-related CBP activator protein (Srcap) and inhibits Srcap-mediated transcription. *J. Virol.* 75: 10033-10040.
3. Monroy, M.A., Schott, N.M., Cox, L., Chen, J.D., Ruh, M. and Chrivia, J.C. 2003. SNF2-related CBP activator protein (SRCAP) functions as a coactivator of steroid receptor-mediated transcription through synergistic interactions with CARM-1 and GRIP-1. *Mol. Endocrinol.* 17: 2519-2528.
4. Eissenberg, J.C., Wong, M. and Chrivia, J.C. 2005. Human SRCAP and *Drosophila melanogaster* DOM are homologs that function in the notch signaling pathway. *Mol. Cell. Biol.* 25: 6559-6569.
5. Ruhl, D.D., Jin, J., Cai, Y., Swanson, S., Florens, L., Washburn, M.P., Conaway, R.C., Conaway, J.W. and Chrivia, J.C. 2006. Purification of a human SRCAP complex that remodels chromatin by incorporating the histone variant H2A.Z into nucleosomes. *Biochemistry* 45: 5671-5677.
6. Cai, Y., Jin, J., Gottschalk, A.J., Yao, T., Conaway, J.W. and Conaway, R.C. 2006. Purification and assay of the human INO80 and SRCAP chromatin remodeling complexes. *Methods* 40: 312-317.
7. Wong, M.M., Cox, L.K. and Chrivia, J.C. 2007. The chromatin remodeling protein, SRCAP, is critical for deposition of the histone variant H2A.Z at promoters. *J. Biol. Chem.* 282: 26132-26139.
8. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611421. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: SRCAP (human) mapping to 16p11.2.

SOURCE

SRCAP (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of SRCAP of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133310 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SRCAP (C-13) is recommended for detection of SRCAP isoforms 1-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SRCAP (C-13) is also recommended for detection of SRCAP isoforms 1-3 in additional species, including equine.

Suitable for use as control antibody for SRCAP siRNA (h): sc-93293, SRCAP shRNA Plasmid (h): sc-93293-SH and SRCAP shRNA (h) Lentiviral Particles: sc-93293-V.

Molecular Weight of SRCAP: 350 kDa.

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) 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.

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.

PROTOCOLS

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