

SAP 30L (C-20): sc-79045

BACKGROUND

In the intact cell, DNA closely associates with histones and other nuclear proteins to form chromatin. The remodeling of chromatin is believed to be a critical component of transcriptional regulation and a major source of this remodeling is brought about by the acetylation of nucleosomal histones. Acetylation of lysine residues in the amino-terminal tail domain of histone results in an allosteric change in the nucleosomal conformation and an increased accessibility to transcription factors by DNA. Conversely, the deacetylation of histones is associated with transcriptional silencing. Chromatin structure alteration may be brought about by the action of ATP-dependent multiprotein complexes. One such complex is the mSin3 corepressor complex, which contains mSin3, the histone deacetylases HDAC1 and HDAC2, the associated proteins SAP 30 and SAP 18, and the putative helicase Mi2. SAP 30L (Sin3A-associated protein p30-like protein) is a 183 amino acid nuclear protein that plays a role in the recruitment of HDAC to the nucleolus. SAP 30L is expressed widely, with the highest levels in testis.

REFERENCES

- Lindfors, K., Viiri, K.M., Niittynen, M., Heinonen, T.Y., Mäki, M. and Kainulainen, H. 2003. TGF- β induces the expression of SAP30L, a novel nuclear protein. *BMC Genomics* 4: 53.
- Assmann, E.M., Alborghetti, M.R., Camargo, M.E. and Kobarg, J. 2006. FEZ1 dimerization and interaction with transcription regulatory proteins involves its coiled-coil region. *J. Biol. Chem.* 281: 9869-9881.
- Viiri, K.M., Korkeamäki, H., Kukkonen, M.K., Nieminen, L.K., Lindfors, K., Peterson, P., Mäki, M., Kainulainen, H. and Lohi, O. 2006. SAP30L interacts with members of the Sin3A corepressor complex and targets Sin3A to the nucleolus. *Nucleic Acids Res.* 34: 3288-3298.
- Korkeamäki, H., Viiri, K., Kukkonen, M.K., Mäki, M. and Lohi, O. 2008. Alternative mRNA splicing of SAP30L regulates its transcriptional repression activity. *FEBS Lett.* 582: 379-384.
- Cetin, E., Cengiz, B., Gunduz, E., Gunduz, M., Nagatsuka, H., Bekir-Beder, L., Fukushima, K., Pehlivan, D., N, M.O., Nishizaki, K., Shimizu, K. and Nagai, N. 2008. Deletion mapping of chromosome 4q22-35 and identification of four frequently deleted regions in head and neck cancers. *Neoplasma* 55: 299-304.
- Viiri, K.M., Heinonen, T.Y., Mäki, M. and Lohi, O. 2009. Phylogenetic analysis of the SAP30 family of transcriptional regulators reveals functional divergence in the domain that binds the nuclear matrix. *BMC Evol. Biol.* 9: 149.
- Viiri, K.M., Jänis, J., Siggers, T., Heinonen, T.Y., Valjakka, J., Bulyk, M.L., Mäki, M. and Lohi, O. 2009. DNA-binding and -bending activities of SAP30L and SAP30 are mediated by a zinc-dependent module and monophosphoinositides. *Mol. Cell. Biol.* 29: 342-356.
- He, Y., Imhoff, R., Sahu, A. and Radhakrishnan, I. 2009. Solution structure of a novel zinc finger motif in the SAP30 polypeptide of the Sin3 corepressor complex and its potential role in nucleic acid recognition. *Nucleic Acids Res.* 37: 2142-2152.

CHROMOSOMAL LOCATION

Genetic locus: SAP30L (human) mapping to 5q33.2; Sap30l (mouse) mapping to 11 B1.3.

SOURCE

SAP 30L (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SAP30L of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79045 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79045 X, 200 μ g/0.1 ml.

APPLICATIONS

SAP 30L (C-20) is recommended for detection of SAP30L of mouse, rat and 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).

SAP 30L (C-20) is also recommended for detection of SAP30L in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SAP 30L siRNA (h): sc-76447, SAP 30L siRNA (m): sc-76448, SAP 30L shRNA Plasmid (h): sc-76447-SH, SAP 30L shRNA Plasmid (m): sc-76448-SH, SAP 30L shRNA (h) Lentiviral Particles: sc-76447-V and SAP 30L shRNA (m) Lentiviral Particles: sc-76448-V.

SAP 30L (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SAP 30L: 21 kDa.

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) 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.

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.