

# SAP 30 (C-18): sc-8471

## 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.

## REFERENCES

- Lee, D.Y., et al. 1993. A positive role for histone acetylation in transcription factor access to nucleosomal DNA. *Cell* 72: 73-82.
- Braunstein, M., et al. 1993. Transcriptional silencing in yeast is associated with reduced nucleosome acetylation. *Genes Dev.* 7: 592-604.
- Bauer, W.R., et al. 1994. Nucleosome structural changes due to acetylation. *J. Mol. Biol.* 236: 685-690.
- Seelig, H.P., et al. 1995. The major dermatomyositis-specific Mi2 auto-antigen is a presumed helicase involved in transcriptional activation. *Arthritis Rheum.* 38: 1389-1399.
- Kingston, R.E., et al. 1996. Repression and activation by multiprotein complexes that alter chromatin structure. *Genes Dev.* 10: 905-920.
- Zhang, Y., et al. 1997. Histone deacetylases and SAP18, a novel polypeptide, are components of a human Sin3 complex. *Cell* 89: 357-364.
- Zhang, Y., et al. 1998. SAP30, a novel protein conserved between human and yeast, is a component of a histone deacetylase complex. *Mol. Cell.* 1: 1021-1031.

## CHROMOSOMAL LOCATION

Genetic locus: SAP30 (human) mapping to 4q34.1; Sap30 (mouse) mapping to 8 B2.

## SOURCE

SAP 30 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SAP30 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-8471 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

SAP 30 (C-18) is recommended for detection of SAP 30 of mouse, rat 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).

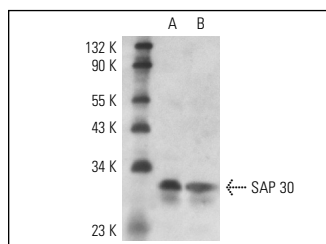
SAP 30 (C-18) is also recommended for detection of SAP 30 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for SAP 30 siRNA (h): sc-44086, SAP 30 siRNA (m): sc-43552, SAP 30 shRNA Plasmid (h): sc-44086-SH, SAP 30 shRNA Plasmid (m): sc-43552-SH, SAP 30 shRNA (h) Lentiviral Particles: sc-44086-V and SAP 30 shRNA (m) Lentiviral Particles: sc-43552-V.

Molecular Weight of SAP 30: 30 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or IMR-32 cell lysate: sc-2409.

## DATA



SAP 30 (C-18): sc-8471. Western blot analysis of SAP 30 expression in SK-N-MC (A) and IMR-32 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Le May, N, et al. 2008. A SAP30 complex inhibits IFN-β expression in Rift Valley fever virus infected cells. *PLoS Pathog.* 4: e13.
- Mansuroglu, Z., et al. 2010. Nonstructural NSs protein of Rift Valley fever virus interacts with pericentromeric DNA sequences of the host cell, inducing chromosome cohesion and segregation defects. *J. Virol.* 84: 928-939.

## STORAGE

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


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Try **SAP 30 (CA14): sc-130425**, our highly recommended monoclonal alternative to SAP 30 (C-18).