SANTA CRUZ BIOTECHNOLOGY, INC.

Mi2-β (S-13): sc-12541

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 de-acetylation 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 autoantigens Mi2-α and Mi2-β.

CHROMOSOMAL LOCATION

Genetic locus: CHD4 (human) mapping to 12p13.31

SOURCE

Mi2-β (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Mi2-β 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-12541 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Mi2-β (S-13) is recommended for detection of Mi2-β 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).

Mi2-β (S-13) is also recommended for detection of Mi2-β in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Mi2-β siRNA (h): sc-37953, Mi2-β shRNA Plasmid (h): sc-37953-SH and Mi2-β shRNA (h) Lentiviral Particles: sc-37953-V.

Molecular Weight of Mi2-β: 218 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132 or K-562 nuclear extract: sc-2130.

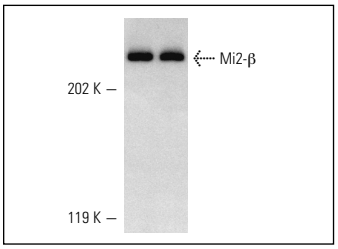
STORAGE

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.

DATA



Mi2-β (S-13): sc-12541. Western blot analysis of Mi2-β expression in K-562 (**A**) and Jurkat (**B**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Mahajan, M.C., et al. 2005. Heterogeneous nuclear ribonucleoprotein C1/C2, MeCP1, and SWI/SNF form a chromatin remodeling complex at the β-globin locus control region. Proc. Natl. Acad. Sci. USA 102: 15012-15017.
2. Huang, L., et al. 2011. Prevention of transcriptional silencing by a replicator-binding complex consisting of SWI/SNF, MeCP1, and hnRNP C1/C2. Mol. Cell. Biol. 31: 3472-3484.

PROTOCOLS

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