SANTA CRUZ BIOTECHNOLOGY, INC.

TIP60 (H-93): sc-25378

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MOZ (monocytic leukemia zinc finger protein) is a chromatin-associated histone acetyltransferase (HAT) that regulates chromatin remodeling and transcription. The MOZ gene was initially isolated as a consequence of two variant translocations that were identified in a distinct subtype of acute myeloid leukemias and resulted in the formation of MOZ fusion proteins. These fusions involve the HAT domain of MOZ with the activation domain of either transcriptional coactivator protein TIF2/GRIP1 or CBP, and lead to en-hanced transcriptional activation by a mechanism involving aberrant histone acetylation. Additional MOZ related proteins, including MORF (MOZ related factor) and Tip60 (TAT interacting proteins 60), share significant similarities with MOZ including the putuative HAT domain. MORF also contains a strong transcriptional repression domain at its N terminus and a highly potent activation domain at the C terminus, suggesting that MORF has both HAT activity and contributes to the regulation of transcriptional activation. Tip60 was originally identified as a coactivator for the HIV TAT protein and also functions as a nuclear hormone receptor coactivator that enhances ligand dependent steroid receptor-mediated transactivation involving the androgen, estrogen and progesterone receptors.

REFERENCES

1. Borrow, J., et al. 1996. The translocation t(8;16)(p11;p13) of acute myeloid leukemia fuses a putative acetyltransferase to the CREB-binding protein. Nat. Genet. 14: 33-41.
2. Aguiar, R.C., et al. 1997. Abnormalities of chromosome band 8p11 in leukemia: two clinical syndromes can be distinguished on the basis of MOZ involvement. Blood 90: 3130-3135.
3. Hilfiker, A., et al. 1997. mof, a putative acetyl transferase gene related to the Tip60 and MOZ human genes and to the SAS genes of yeast, is required for dosage compensation in *Drosophila*. EMBO J. 16: 2054-2060.
4. Yamamoto, T., et al. 1997. Novel substrate specificity of the histone acetyltransferase activity of HIV-1-Tat interactive protein Tip60. J. Biol. Chem. 272: 30595-30598.

CHROMOSOMAL LOCATION

Genetic locus: KAT5 (human) mapping to 11q13.1; Kat5 (mouse) mapping to 19 A.

SOURCE

TIP60 (H-93) is a rabbit polyclonal antibody raised against amino acids 421-513 of TIP60 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.

STORAGE

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

APPLICATIONS

TIP60 (H-93) is recommended for detection of TIP60 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

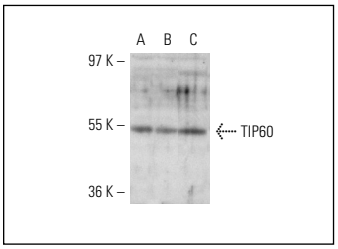
TIP60 (H-93) is also recommended for detection of TIP60 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TIP60 siRNA (h): sc-37966, TIP60 siRNA (m): sc-37967, TIP60 shRNA Plasmid (h): sc-37966-SH, TIP60 shRNA Plasmid (m): sc-37967-SH, TIP60 shRNA (h) Lentiviral Particles: sc-37966-V and TIP60 shRNA (m) Lentiviral Particles: sc-37967-V.

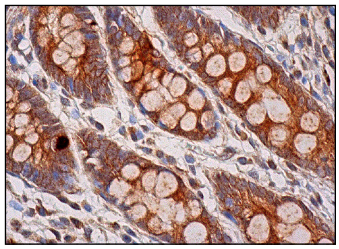
Molecular Weight of TIP60: 54 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, CCRF-CEM nuclear extract: sc-2146 or IMR-32 nuclear extract: sc-2148.

DATA



TIP60 (H-93): sc-25378. Western blot analysis of TIP60 expression in Jurkat (**A**), CCRF-CEM (**B**) and IMR-32 (**C**) nuclear extracts.



TIP60 (H-93): sc-25378. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Serra, H.G., et al. 2006. RORα-mediated Purkinje cell development determines disease severity in adult SCA1 mice. Cell 127: 697-708.
2. Hobbs, C.A., et al. 2006. TIP60 protein isoforms and altered function in skin and tumors that overexpress ornithine decarboxylase. Cancer Res. 66: 8116-8122.
3. Kenneth, N.S., et al. 2007. TRRAP and GCN5 are used by c-Myc to activate RNA polymerase III transcription. Proc. Natl. Acad. Sci. USA 104: 14917-14922.

RESEARCH USE

For research use only, not for use in diagnostic procedures.