# TIP60 (N-17): sc-5725



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 enhanced transcriptional activation by a mechanism involving aberrant histone acetylation. Ad-ditional 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.

## **CHROMOSOMAL LOCATION**

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

#### **SOURCE**

TIP60 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TIP60 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-5725 X, 200  $\mu g$ /0.1 ml.

Blocking peptide available for competition studies, sc-5725 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

TIP60 (N-17) 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  $\mu$ g per 100-500  $\mu$ g 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).

TIP60 (N-17) is also recommended for detection of TIP60 in additional species, including canine, bovine and porcine.

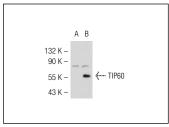
Suitable for use as control antibody for TIP60 siRNA (h): sc-37966, TIP60 siRNA (m): sc-37967, TIP60 shRNA Plasmid (h): sc-37966-SH, TIP60 shRNA Plasmid (m): sc-37967-SH, TIP60 shRNA (h) Lentiviral Particles: sc-37966-V and TIP60 shRNA (m) Lentiviral Particles: sc-37967-V.

TIP60 (N-17) X TransCruz antibody is recommended for ChIP assays. Molecular Weight of TIP60: 54 kDa.

#### **STORAGE**

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

## **DATA**



TIP60 (N-17): sc-5725. Western blot analysis of TIP60 expression in non-transfected: sc-117752 (**A**) and mouse TIP60 transfected: sc-124076 (**B**) 293T whole cell

#### **SELECT PRODUCT CITATIONS**

- 1. Baek, S., et al. 2002. Exchange of N-CoR corepressor and TIP60 coactivator complexes links gene expression by NF $\kappa$ B and  $\beta$ -amyloid precursor protein. Cell 110: 55-67.
- Miyamoto, N., et al. 2008. TIP60 is regulated by circadian transcription factor clock and is involved in cisplatin resistance. J. Biol. Chem. 283: 18218-18226.
- Hejna, J., et al. 2008. Tip60 is required for DNA interstrand cross-link repair in the Fanconi anemia pathway. J. Biol. Chem. 283: 9844-9851.
- 4. Kim, J.W., et al. 2008. TIP60 represses transcriptional activity of p73 $\beta$  via an MDM2-bridged ternary complex. J. Biol. Chem. 283: 20077-20086.
- Woo, A.J., et al. 2011. Role of ZBP-89 in human globin gene regulation and erythroid differentiation. Blood 118: 3684-3693.
- Charvet, C., et al. 2011. Phosphorylation of Tip60 by GSK-3 determines the induction of PUMA and apoptosis by p53. Mol. Cell 42: 584-596.
- Kim, C.H., et al. 2012. Transcriptional activity of paired homeobox Pax6 is enhanced by histone acetyltransferase Tip60 during mouse retina development. Biochem. Biophys. Res. Commun. 424: 427-432.
- Neri, F., et al. 2012. Myc regulates the transcription of the PRC2 gene to control the expression of developmental genes in embryonic stem cells. Mol. Cell. Biol. 32: 840-851.

#### **RESEARCH USE**

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



Try **TIP60 (C-7):** sc-166323 or **TIP60 (T4D2):** sc-81757, our highly recommended monoclonal alternatives to TIP60 (N-17). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **TIP60 (C-7):** sc-166323.