SANTA CRUZ BIOTECHNOLOGY, INC.

TIP60 (K-17): sc-5727



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. 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.

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-5727 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-5727 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIP60 (K-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 μ g per 100-500 μ 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 (K-17) is also recommended for detection of TIP60 in additional species, including equine, 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 (K-17) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of TIP60: 54 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

STORAGE

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

DATA



TIP60 (K-17): sc-5727. Western blot analysis of TIP60 expression in Jurkat (A), CCRF-CEM (B) and IMR-32 (C) nuclear extracts.

SELECT PRODUCT CITATIONS

- 1. Baek, S., et al. 2002. Exchange of N-CoR corepressor and TIP60 coactivator complexes links gene expression by NF κ B and β -amyloid precursor protein. Cell 110: 55-67.
- Wee, G., et al. 2007. Epigenetic alteration of the donor cells does not recapitulate the reprogramming of DNA methylation in cloned embryos. Reproduction 134: 781-787.
- 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.
- Tetievsky, A. and Horowitz, M. 2010. Posttranslational modifications in histones underlie heat acclimation-mediated cytoprotective memory. J. Appl. Physiol. 109: 1552-1561.
- 5. Peña, A.N., et al. 2011. MRG15 activates the cdc2 promoter via histone acetylation in human cells. Exp. Cell Res. 317: 1534-1540.
- 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.
- Zhang, Z., et al. 2015. Interferon regulatory factor 1 marks activated genes and can induce target gene expression in systemic lupus erythematosus. Arthritis Rheumatol. 67: 785-976.

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 (K-17). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see TIP60 (C-7): sc-166323.