SANTA CRUZ BIOTECHNOLOGY, INC.

Hda1 (E-9): sc-393814

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Remodeling of chromatin structure is believed to be a critical component of transcriptional regulation. A major source of remodeling is brought about by the acetylation of nucleosomal histones. Acetylation results in an allosteric change in the nucleosomal conformation and an increased accessibility of DNA to transcription factors. Conversely, the deacetylation of histones is associated with transcriptional silencing. Hda1, HDA2, HDA3, HDA4, HDA5, HDA6 and HDA7 have been identified as histone deacetylases in *C. elegans* and are homologous with histone deacetylase proteins in both yeast and mammalian systems. Histone deacetylase Hda1 (also known as Hda1 or N2819 in yeast), deacetylates Histone H2A, H2B, H3 and H4.

REFERENCES

1. Qian, Y.W., Wang, Y.C., Hollingsworth, R.E., Jr., Jones, D., Ling, N. and Lee, E.Y. 1993. A retinoblastoma-binding protein related to a negative regulator of Ras in yeast. Nature 364: 648-652.
2. Qian, Y.W. and Lee, E.Y. 1995. Dual retinoblastoma-binding proteins with properties related to a negative regulator of Ras in yeast. J. Biol. Chem. 270: 25507-25513.
3. Rundlett, S.E., Carmen, A.A., Kobayashi, R., Bavykin, S., Turner, B.M. and Grunstein, M. 1996. Hda1 and RPD3 are members of distinct yeast histone deacetylase complexes that regulate silencing and transcription. Proc. Natl. Acad. Sci. USA 93: 14503-14508.
4. Carmen, A.A., Rundlett, S.E. and Grunstein, M. 1996. Hda1 and HDA3 are components of a yeast histone deacetylase (HDA) complex. J. Biol. Chem. 271: 15837-15844.
5. Pennisi, E. 1997. Opening the way to gene activity. Science 275: 155-156.
6. Guan, L.S., Rauchman, M. and Wang, Z.Y. 1998. Induction of Rb-associated protein (RbAp46) by Wilms' tumor suppressor WT1 mediates growth inhibition. J. Biol. Chem. 273: 27047-27050.

SOURCE

Hda1 (E-9) is a mouse monoclonal antibody raised against amino acids 400-706 (Sc) mapping at the C-terminus of Hda1 of *Saccharomyces cerevisiae* origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Hda1 (E-9) is available conjugated to agarose (sc-393814 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393814 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393814 PE), fluorescein (sc-393814 FITC), Alexa Fluor® 488 (sc-393814 AF488), Alexa Fluor® 546 (sc-393814 AF546), Alexa Fluor® 594 (sc-393814 AF594) or Alexa Fluor® 647 (sc-393814 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393814 AF680) or Alexa Fluor® 790 (sc-393814 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Hda1 (E-9) is recommended for detection of Hda1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:100, 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).

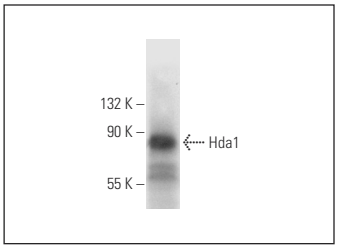
Molecular Weight of Hda1: 84 kDa.

Positive Controls: *Saccharomyces cerevisiae* whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Hda1 (E-9): sc-393814. Western blot analysis of Hda1 expression in *Saccharomyces cerevisiae* whole cell lysate.

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.

PROTOCOLS

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