

TADA3L (3K12): sc-134248

BACKGROUND

ADA3 (transcriptional adapter 3-like, STAF54) is a 432 amino acid protein encoded by the human gene TADA3L. ADA3 is a ubiquitously expressed nuclear protein that functions as a component of the PCAF (p300/CBP-associated factor) complex. The PCAF complex is capable of efficiently acetylating histones in a nucleosomal context. The PCAF complex is the human homolog of the yeast SAGA complex. ADA3 interacts with the E6 gene and is a target of E6-induced degradation. ADA3 binds selectively to the high-risk HPV E6 proteins and immortalization-competent E6 mutants. ADA3 functions as a co-activator for p53-mediated transactivation by stabilizing p53 protein.

REFERENCES

1. Sterner, D.E., Nathan, D., Reindle, A., Johnson, E.S. and Berger, S.L. 2006. SUMOylation of the yeast GCN5 protein. *Biochemistry* 45: 1035-1042.
2. Guelman, S., Suganuma, T., Florens, L., Swanson, S.K., Kiesecker, C.L., Kusch, T., Anderson, S., Washburn, M.P., Abmayr, S.M. and Workman, J.L. 2006. Host cell factor and an uncharacterized SANT domain protein are stable components of ATAC, a novel dADA2A/dGCN5-containing histone acetyltransferase complex in *Drosophila*. *Mol. Cell. Biol.* 26: 871-882.
3. Guelman, S., Suganuma, T., Florens, L., Weake, V., Swanson, S.K., Washburn, M.P., Abmayr, S.M. and Workman, J.L. 2006. The essential gene *wda* encodes a WD40 repeat subunit of *Drosophila* SAGA required for Histone H3 acetylation. *Mol. Cell. Biol.* 26: 7178-7189.
4. Nag, A., Germaniuk-Kurowska, A., Dimri, M., Sassack, M.A., Gurumurthy, C.B., Gao, Q., Dimri, G., Band, H. and Band, V. 2007. An essential role of human ADA3 in p53 acetylation. *J. Biol. Chem.* 282: 8812-8820.
5. Barrios, A., Selleck, W., Hnatkovich, B., Kramer, R., Sermwittayawong, D. and Tan, S. 2007. Expression and purification of recombinant yeast ADA2/ADA3/GCN5 and Piccolo NuA4 histone acetyltransferase complexes. *Methods* 41: 271-277.

CHROMOSOMAL LOCATION

Genetic locus: TADA3 (human) mapping to 3p25.3.

SOURCE

TADA3L (3K12) is a mouse monoclonal antibody raised against recombinant ADA3 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml 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.

RESEARCH USE

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

APPLICATIONS

TADA3L (3K12) is recommended for detection of TADA3L 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TADA3L siRNA (h): sc-78466, TADA3L shRNA Plasmid (h): sc-78466-SH and TADA3L shRNA (h) Lentiviral Particles: sc-78466-V.

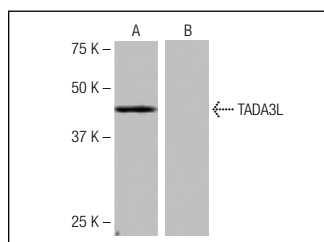
Molecular Weight of TADA3L: 49 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, OV-90 whole cell lysates, or TADA3L (m3): 293T Lysate: sc-118235.

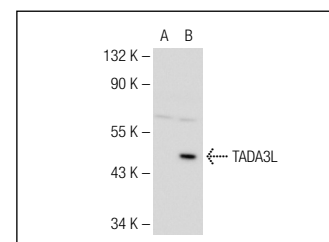
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



TADA3L (3K12): sc-134248. Western blot analysis of TADA3L expression in human TADA3L transfected (A) and non-transfected (B) 293T whole cell lysates.



TADA3L (3K12): sc-134248. Western blot analysis of TADA3L expression in non-transfected: sc-117752 (A) and mouse TADA3L transfected: sc-118235 (B) 293T whole cell lysates.

PROTOCOLS

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