

NAT-10 (P-16): sc-65143

BACKGROUND

NAT-10 (N-acetyltransferase 10) is a nuclear protein that belongs to the UPF0202 family. It has a single N-acetyltransferase domain that likely functions as a histone acetyltransferase. NAT-10 functions primarily to regulate the activity of telomerase. It is upregulated in response to DNA damage and is likely to take part in genotoxic resistance and DNA repair. NAT-10 has a high binding potential for the promoter region of TERT which stimulates the production of telomerase. These varieties of function imply that human telomerase complexes have multiple functions rather than specific duties.

REFERENCES

1. Lv, J., Liu, H., Wang, Q., Tang, Z., Hou, L. and Zhang, B. 2003. Molecular cloning of a novel human gene encoding histone acetyltransferase-like protein involved in transcriptional activation of hTERT. *Biochem. Biophys. Res. Commun.* 311: 506-513.
2. Liu, H.J., Ling, Y., Hou, L. and Zhang, B. 2005. An analysis of induced expression and function of telomerase-regulation associated hALP gene on genotoxic agents. *Zhonghua Bing Li Xue Za Zhi* 34: 732-736.
3. Fu, D. and Collins, K. 2007. Purification of human telomerase complexes identifies factors involved in telomerase biogenesis and telomere length regulation. *Mol. Cell* 28: 773-785.
4. Chi, Y.H., Haller, K. and Jeang, K.T. 2007. Histone acetyltransferase hALP and nuclear membrane protein hsSUN1 function in de-condensation of mitotic chromosomes. *J. Biol. Chem.* 282: 27447-27458.
5. Liu, H., Ling, Y., Gong, Y., Sun, Y., Hou, L. and Zhang, B. 2007. DNA damage induces N-acetyltransferase NAT10 gene expression through transcriptional activation. *Mol. Cell. Biochem.* 300: 249-258.

CHROMOSOMAL LOCATION

Genetic locus: NAT10 (human) mapping to 11p13; Nat10 (mouse) mapping to 2 E2.

SOURCE

NAT-10 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NAT-10 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.

Blocking peptide available for competition studies, sc-65143 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

NAT-10 (P-16) is recommended for detection of NAT-10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NAT-10 (P-16) is also recommended for detection of NAT-10 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NAT-10 siRNA (h): sc-62660, NAT-10 siRNA (m): sc-62661, NAT-10 shRNA Plasmid (h): sc-62660-SH, NAT-10 shRNA Plasmid (m): sc-62661-SH, NAT-10 shRNA (h) Lentiviral Particles: sc-62660-V and NAT-10 shRNA (m) Lentiviral Particles: sc-62661-V.

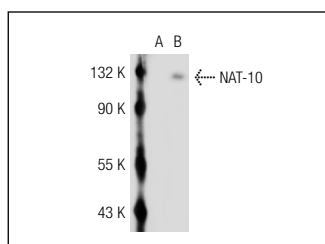
Molecular Weight of NAT-10: 116 kDa.

Positive Controls: NAT-10 (m): 293T Lysate: sc-127198

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NAT-10 (P-16): sc-65143. Western blot analysis of NAT-10 expression in non-transfected: sc-117752 (A) and mouse NAT-10 transfected: sc-127198 (B) 293T whole cell lysates.

PROTOCOLS

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

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Try **NAT-10 (B-4): sc-271770** or **NAT-10 (D-5): sc-271142**, our highly recommended monoclonal alternatives to NAT-10 (P-16).