

NAT-10 (H-300): sc-135039

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.

CHROMOSOMAL LOCATION

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

SOURCE

NAT-10 (H-300) is a rabbit polyclonal antibody raised against amino acids 726-1025 mapping at the C-terminus 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.

APPLICATIONS

NAT-10 (H-300) 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), 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).

NAT-10 (H-300) is also recommended for detection of NAT-10 in additional species, including equine.

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.

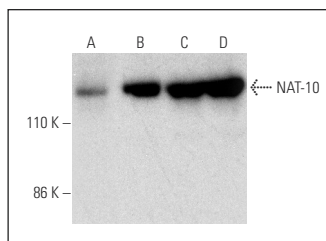
Molecular Weight of NAT-10: 116 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or Ramos nuclear extract: sc-2153.

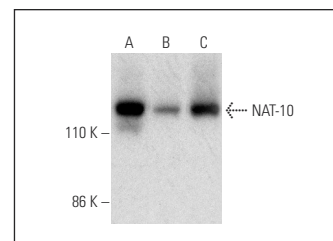
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NAT-10 (H-300): sc-135039. Western blot analysis of NAT-10 expression in Jurkat whole cell lysate (A) and HeLa (B), Jurkat (C) and Ramos (D) nuclear extracts.



NAT-10 (H-300): sc-135039. Western blot analysis of NAT-10 expression in PMA treated Jurkat (A), MCF7 (B) and K-562 (C) whole cell lysates.

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 or our catalog for detailed protocols and support products.



MONOS
Satisfaction
Guaranteed

Try **NAT-10 (B-4): sc-271770** or **NAT-10 (D-5): sc-271142**, our highly recommended monoclonal alternatives to NAT-10 (H-300).