NAT-13 (H-21): sc-133806

SANTA CRUZ
BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. NAT-13 (N-acetyltransferase 13), also known as NAA50 (N(alpha)-acetyltransferase 50, NatE catalytic subunit), MAK3, NAT5 (N-acetyltransferase 5) or SAN, is a 169 amino acid cytoplasmic protein belonging to the acetyltransferase family and GNAT subfamily. Existing as two alternatively spliced isoforms, NAT-13 interacts with NARG1 and ARD1 as a possible catalytic component of the ARD1-NARG1 complex. NAT-13 is also known to interact with MAK10 and is encoded by a gene that maps to human chromosome 3q13.2.

REFERENCES

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2. Arnesen, T., Anderson, D., Torsvik, J., Halseth, H.B., Varhaug, J.E. and Lillehaug, J.R. 2006. Cloning and characterization of hNAT5/hSAN: an evolutionarily conserved component of the NatA protein N-α-acetyltransferase complex. Gene 371: 291-295.

3. Hou, F., Chu, C.W., Kong, X., Yokomori, K. and Zou, H. 2007. The acetyltransferase activity of San stabilizes the mitotic cohesin at the centromeres in a shugoshin-independent manner. J. Cell Biol. 177: 587-597.

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5. Polevoda, B., Arnesen, T. and Sherman, F. 2009. A synopsis of eukaryotic N α-terminal acetyltransferases: nomenclature, subunits and substrates. BMC Proc. 3 Suppl. 6: S2.

6. Starheim, K.K., Gromyko, D., Evjenth, R., Ryningen, A., Varhaug, J.E., Lillehaug, J.R. and Arnesen, T. 2009. Knockdown of human N α-terminal acetyltransferase complex C leads to p53-dependent apoptosis and aberrant human ARL8B localization. Mol. Cell. Biol. 29: 3569-3581.

CHROMOSOMAL LOCATION

Genetic locus: NAA50 (human) mapping to 3q13.2.

SOURCE

NAT-13 (H-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic NAT-13 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

NAT-13 (H-21) is recommended for detection of NAT-13 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 NAT-13 siRNA (h): sc-78481, NAT-13 shRNA Plasmid (h): sc-78481-SH and NAT-13 shRNA (h) Lentiviral Particles: sc-78481-V.

Molecular Weight of NAT-13: 19 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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).

DATA
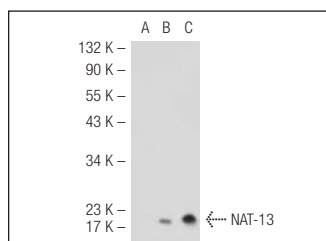
NAT-13 (H-21): sc-133806. Western blot analysis of NAT-13 expression in non-transfected 293T: sc-117752 (**A**), human NAT-13 transfected 293T: sc-175988 (**B**) and K-562 (**C**) whole cell lysates.
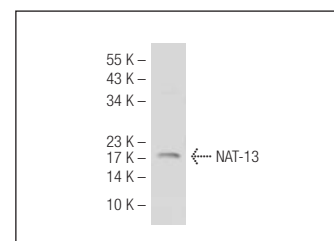
NAT-13 (H-21): sc-133806. Western blot analysis of NAT-13 expression in HeLa whole cell lysate.

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.