# NAT-5 (36-8): sc-100645



The Power to Question

#### **BACKGROUND**

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. NAT-5 (N-acetyltransferase 5) is an intracellular protein involved in N-acetylation, particularly the acetylation of histones. NAT-5 is a component of the ARD1-NAT-1 (human arrest defective 1-N-acetyltransferase) complex, which acetylates the  $\alpha$ -amino groups of proteins during translation. NAT-5 contains an enzymatic acetyltransferase domain, which makes it an active component of the complex. ARD1 and NAT-1 have both shown upregulation in certain cancers and may facilitate the metastasis of papillary thyroid carcinomas.

## **REFERENCES**

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- Arnesen, T., Anderson, D., Baldersheim, C., Lanotte, M., Varhaug, J.E. and Lillehaug, J.R. 2005. Identification and characterization of the human ARD1-NATH protein acetyltransferase complex. Biochem. J. 386: 433-443.
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- 5. 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- $\alpha$ -acetyltransferase complex. Gene 371: 291-295.

## **CHROMOSOMAL LOCATION**

Genetic locus: NAT5 (human) mapping to 20p11.23.

## **SOURCE**

NAT-5 (36-8) is a mouse monoclonal antibody raised against recombinant NAT-5 of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g \ lgG_1$  kappa light chain in 1.0 ml of 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.

# **PROTOCOLS**

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

#### **APPLICATIONS**

NAT-5 (36-8) is recommended for detection of NAT-5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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-5 siRNA (h): sc-62662, NAT-5 shRNA Plasmid (h): sc-62662-SH and NAT-5 shRNA (h) Lentiviral Particles: sc-62662-V.

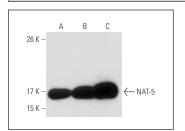
Molecular Weight of NAT-5: 20 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, F9 cell lysate: sc-2245 or NAT-5 (h4): 293T Lysate: sc-176164.

### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ 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).

#### **DATA**



NAT-5 (36-8): sc-100645. Western blot analysis of NAT-5 expression in non-transfected 293T: sc-117752 (A) human NAT-5 transfected 293T: sc-176164 (B) and HL-60 (C) whole cell lysates.

## **RESEARCH USE**

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

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