SANTA CRUZ BIOTECHNOLOGY, INC.

NAT-9 (K-14): sc-82237

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. NAT-9 (N-acetyltransferase 9), also known as EBSP (embryo brain-specific protein), is a 207 amino acid protein belonging to the acetyltransferase family and the GNAT subfamily. Containing a N-acetyltransferase domain, NAT-9 may be associated with psoriasis and psoriatic arthritis, a type of inflammatory/autoimmune disease that affects skin, tendons and/or joints of the hands and feet. Expressed as two isoforms produced by alternative splicing events, NAT-9 is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

1. Helms, C., et al. 2003. A putative RUNX1 binding site variant between SLC9A3R1 and NAT9 is associated with susceptibility to psoriasis. Nat. Genet. 35: 349-356.
2. Bowcock, A.M. and Cookson, W.O. 2004. The genetics of psoriasis, psoriatic arthritis and atopic dermatitis. Hum. Mol. Genet. 13: R43-R55.
3. Bowcock, A.M. 2005. The genetics of psoriasis and autoimmunity. Annu. Rev. Genomics Hum. Genet. 6: 93-122.
4. Yamada, R. and Ymamoto, K. 2005. Recent findings on genes associated with inflammatory disease. Mutat. Res. 573: 136-151.
5. Morar, N., et al. 2006. Investigation of the chromosome 17q25 PSORS2 locus in atopic dermatitis. J. Invest. Dermatol. 126: 603-606.
6. Filer, C.E., et al. 2009. Investigation of association of genes NAT-9, SLC9A3R1 and RAPTOR on chromosome 17q25 with psoriatic arthritis. Ann. Rheum. Dis. 68: 292-293.
7. Danik, J.S., et al. 2009. Novel loci, including those related to Crohn disease, psoriasis, and inflammation, identified in a genome-wide association study of fibrinogen in 17,686 women: the Women's Genome Health Study. Circ. Cardiovasc. Genet. 2: 134-141.

CHROMOSOMAL LOCATION

Genetic locus: NAT9 (human) mapping to 17q25.1; Nat9 (mouse) mapping to 11 E2.

SOURCE

NAT-9 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NAT-9 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-82237 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

NAT-9 (K-14) is recommended for detection of NAT-9 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-9 (K-14) is also recommended for detection of NAT-9 in additional species, including canine and porcine.

Suitable for use as control antibody for NAT-9 siRNA (h): sc-75878, NAT-9 siRNA (m): sc-75879, NAT-9 shRNA Plasmid (h): sc-75878-SH, NAT-9 shRNA Plasmid (m): sc-75879-SH, NAT-9 shRNA (h) Lentiviral Particles: sc-75878-V and NAT-9 shRNA (m) Lentiviral Particles: sc-75879-V.

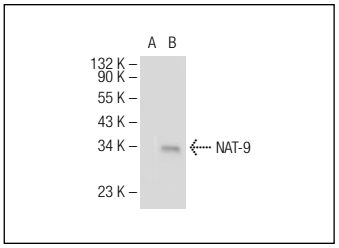
Molecular Weight of NAT-9: 23 kDa.

Positive Controls: NAT-9 (m): 293T Lysate: sc-125690.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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-9 (K-14): sc-82237. Western blot analysis of NAT-9 expression in non-transfected: sc-117752 (**A**) and mouse NAT-9 transfected: sc-125690 (**B**) 293T 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.

PROTOCOLS

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