SANTA CRUZ BIOTECHNOLOGY, INC.

NHN1 (F-2): sc-514364

BACKGROUND

NHN1, also known as ZC3H18 (zinc finger CCCH domain-containing protein 18), is a 953 amino acid nuclear protein that contains one C3H1-type zinc finger and exists as 2 alternatively spliced isoforms. The gene that encodes NHN1 contains more than 61,500 bases and maps to human chromosome 16q24.2. Encoding over 900 genes and consisting of approximately 90 million base pairs, chromosome 16 makes up nearly 3% of the human genome and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, when mutated, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. Alterations in the CREB gene and NOD2 gene, both of which are located on chromosome 16, results in Rubinstein-Taybi syndrome and Crohn's disease, respectively. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

REFERENCES

1. Mentzer, W.C., et al. 1977. An unusual form of chronic neutropenia in a father and daughter with hypogammaglobulinaemia. Br. J. Haematol. 36: 313-322.
2. Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
3. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
4. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
5. Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. Neurology 58: 1273-1276.
6. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. Curr. Gastroenterol Rep. 6: 467-473.

CHROMOSOMAL LOCATION

Genetic locus: ZC3H18 (human) mapping to 16q24.2; Zc3h18 (mouse) mapping to 8 E1.

SOURCE

NHN1 (F-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 341-358 within an internal region of NHN1 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514364 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

NHN1 (F-2) is recommended for detection of NHN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for NHN1 siRNA (h): sc-93372, NHN1 siRNA (m): sc-149963, NHN1 shRNA Plasmid (h): sc-93372-SH, NHN1 shRNA Plasmid (m): sc-149963-SH, NHN1 shRNA (h) Lentiviral Particles: sc-93372-V and NHN1 shRNA (m) Lentiviral Particles: sc-149963-V.

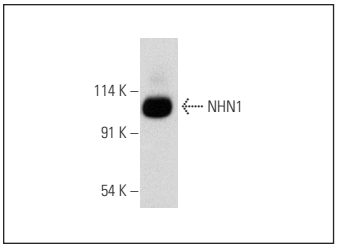
Molecular Weight of NHN1 isoforms: 106/84 kDa.

Positive Controls: human cerebellum tissue extract.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NHN1 (F-2): sc-514364. Western blot analysis of NHN1 expression in human cerebellum tissue extract.

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 for detailed protocols and support products.