SANTA CRUZ BIOTECHNOLOGY, INC.

NHN1 (F-12): sc-138474

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 two 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

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2. Baraitser, M., et al. 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.
7. Mathew, C.G., et al. 2004. Genetics of inflammatory bowel disease: progress and prospects. Hum. Mol. Genet. 13: R161-R168.

CHROMOSOMAL LOCATION

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

SOURCE

NHN1 (F-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NHN1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-138474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NHN1 (F-12) is recommended for detection of NHN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NHN1 (F-12) is also recommended for detection of NHN1 in additional species, including canine.

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.

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) 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.

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.