

NHLRC4 (S-17): sc-244013

BACKGROUND

NHLRC4 (NHL-repeat-containing protein 4) is a 123 amino acid protein that contains 2 NHL repeats and is encoded by a gene that maps to human chromosome 16p13.3. Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene.

REFERENCES

1. Baraitser, M., et al. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. *Clin. Genet.* 23: 318-320.
2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
3. Slack, F.J., et al. 1998. A novel repeat domain that is often associated with RING finger and B-box motifs. *Trends Biochem. Sci.* 23: 474-475.
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. Kuhlensäuer, 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: NHLRC4 (human) mapping to 16p13.3.

SOURCE

NHLRC4 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NHLRC4 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-244013 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

NHLRC4 (S-17) is recommended for detection of NHLRC4 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)], 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); non cross-reactive with Malin, NHLRC2 or NHLRC3.

Suitable for use as control antibody for NHLRC4 siRNA (h): sc-93285, NHLRC4 shRNA Plasmid (h): sc-93285-SH and NHLRC4 shRNA (h) Lentiviral Particles: sc-93285-V.

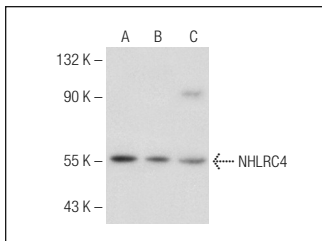
Molecular Weight of NHLRC4: 13 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, U-2 OS cell lysate: sc-2295 or A-431 whole cell lysate: sc-2201.

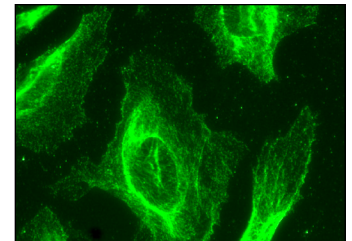
RECOMMENDED SECONDARY REAGENTS

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



NHLRC4 (S-17): sc-244013. Western blot analysis of NHLRC4 expression in U-2 OS (A), A-431 (B) and Jurkat (C) whole cell lysates.



NHLRC4 (S-17): sc-244013. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization.

PROTOCOLS

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