SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC102A (N-17): sc-242327



BACKGROUND

CCDC102A (coiled-coil domain-containing protein 102A), also known as MGC10992 or MGC13119, is a 550 amino acid protein encoded by a gene that maps to human chromosome 16q21. 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

- Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
- Breuning, M.H., Dauwerse, H.G., Fugazza, G., Saris, J.J., Spruit, L., Wijnen, H., Tommerup, N., van der Hagen, C.B., Imaizumi, K., Kuroki, Y., van den Boogaard, M.J., de Pater, J.M., Mariman, E.C., Hamel, B.C., Himmelbauer, H., Frischauf, A.M., Stallings, R., Beverstock, G.C., van Ommen, G.J. and Hennekam, R.C. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
- Bomont, P., Cavalier, L., Blondeau, F., Ben Hamida, C., Belal, S., Tazir, M., Demir, E., Topaloglu, H., Korinthenberg, R., Tüysüz, B., Landrieu, P., Hentati, F. and Koenig, M. 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.
- Kuhlenbäumer, G., Young, P., Oberwittler, C., Hünermund, G., Schirmacher, A., Domschke, K., Ringelstein, B. and Stögbauer, F. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. Neurology 58: 1273-1276.

CHROMOSOMAL LOCATION

Genetic locus: CCDC102A (human) mapping to 16q21; Ccdc102a (mouse) mapping to 8 D1.

SOURCE

CCDC102A (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CCDC102A 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-242327 P, (100 μ g 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

CCDC102A (N-17) is recommended for detection of CCDC102A 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); non cross-reactive with CCDC102B.

CCDC102A (N-17) is also recommended for detection of CCDC102A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CCDC102A siRNA (h): sc-93310, CCDC102A siRNA (m): sc-142045, CCDC102A shRNA Plasmid (h): sc-93310-SH, CCDC102A shRNA Plasmid (m): sc-142045-SH, CCDC102A shRNA (h) Lentiviral Particles: sc-93310-V and CCDC102A shRNA (m) Lentiviral Particles: sc-142045-V.

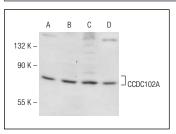
Molecular Weight of CCDC102A: 63 kDa.

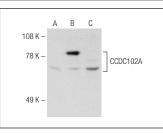
Positive Controls: CCDC102A (h): 293T Lysate: sc-175390, Y79 cell lysate: sc-2240 or Ramos cell lysate: sc-2216.

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





CCDC102A (N-17): sc-242327. Western blot analysis of CCDC102A expression in HUV-EC-C (A), Y79 (B), Ramos (C) and HeLa (D) whole cell lysates.

CCDC102A (N-17): sc-242327. Western blot analysis of CCDC102A expression in non-transfected 2937: sc-117752 (A), human CCDC102A transfected 2937: sc-175390 (B) and HeLa (C) 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.