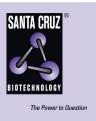
SANTA CRUZ BIOTECHNOLOGY, INC.

C16orf81 (C-20): sc-323580



BACKGROUND

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. 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. The C16orf81 gene product has been provisionally designated C16orf81 pending further characterization.

REFERENCES

- 1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
- Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
- Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
- Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.
- King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. Genomics 90: 493-501.
- Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germline breakpoints. Genomics 90: 567-573.
- Koop, O., et al. 2007. Genotype-phenotype analysis in patients with giant axonal neuropathy (GAN). Neuromuscul. Disord. 17: 624-630.
- Tattoli, I., et al. 2007. The Nodosome: Nod1 and Nod2 control bacterial infections and inflammation. Semin. Immunopathol. 29: 289-301.
- 9. Yang, Y., et al. 2007. Giant axonal neuropathy. Cell. Mol. Life Sci. 64: 601-609.

CHROMOSOMAL LOCATION

Genetic locus: LINC00304 (human) mapping to 16q24.3.

SOURCE

C16orf81 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of C16orf81 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-323580 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C16orf81 (C-20) is recommended for detection of C16orf81 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 C16orf81 siRNA (h): sc-93198, C16orf81 shRNA Plasmid (h): sc-93198-SH and C16orf81 shRNA (h) Lentiviral Particles: sc-93198-V.

Molecular Weight of C16orf81: 16 kDa.

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) Immunofluo-rescence: 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.

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.