SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC116 (N-16): sc-86358

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The Power to Question

BACKGROUND

CCDC116 (coiled-coil domain containing 116) is a 515 amino acid protein that exists as 2 alternatively spliced isoforms. Encoded by a gene that maps to human chromosome 22q11.21, CCDC116 is induced by curcumin (diferulolylmethane), although its role is unclear. CCDC116 is significantly affected by dietary curcumin, which may have a protective role in inflammatory bowel disease (IBD) and may reduce the relapse rate in human ulcerative colitis (UC). As the second smallest human chromosome, chromosome 22 contains over 500 genes and about 49 million bases. Phelan-McDermid syndrome, Neurofibromatosis type 2 and autism are associated with chromosome 22. A schizophrenia susceptibility locus has been identified on chromosome 22 and studies show that 22q11 deletion symptoms include a high incidence of schizophrenia. Translocation between chromosomes 9 and 22 may lead to the formation of Philadelphia Chromosome and subsequent production of a novel fusion protein known as Bcr-Abl, a potent cell proliferation activator found in several types of leukemia.

REFERENCES

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4. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
5. Paylor, R., et al. 2006. TBX1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.
6. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
7. Ahronowitz, I., et al. 2007. Mutational spectrum of the NF2 gene: a meta-analysis of 12 years of research and diagnostic laboratory findings. Hum. Mutat. 28: 1-12.
8. Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

CHROMOSOMAL LOCATION

Genetic locus: CCDC116 (human) mapping to 22q11.21, Ccdc116 (mouse) mapping to 16 B1.

SOURCE

CCDC116 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of CCDC116 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-86358 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCDC116 (N-16) is recommended for detection of CCDC116 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 other CCDC family members.

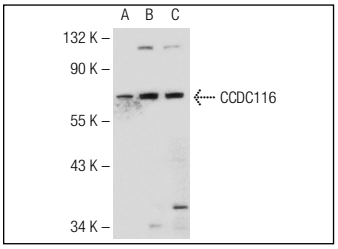
CCDC116 (N-16) is also recommended for detection of CCDC116 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CCDC116 siRNA (h): sc-72821, CCDC116 siRNA (m): sc-142061, CCDC116 shRNA Plasmid (h): sc-72821-SH, CCDC116 shRNA Plasmid (m): sc-142061-SH, CCDC116 shRNA (h) Lentiviral Particles: sc-72821-V and CCDC116 shRNA (m) Lentiviral Particles: sc-142061-V.

Molecular Weight of CCDC116 isoform 1/2: 57/68 kDa.

Positive Controls: Ramos cell lysate: sc-2216, LNCaP cell lysate: sc-2231 or HeLa whole cell lysate: sc-2200.

DATA



CCDC116 (N-16): sc-86358. Western blot analysis of CCDC116 expression in HeLa (**A**), Ramos (**B**) and LNCaP (**C**) whole cell lysates.

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.