

CCDC116 (G-5): sc-514528

BACKGROUND

CCDC116 (coiled-coil domain containing 116) is a 515 amino acid protein that exists as two 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

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
2. Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
3. 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.
4. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.
5. 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.

CHROMOSOMAL LOCATION

Genetic locus: CCDC116 (human) mapping to 22q11.21.

SOURCE

CCDC116 (G-5) is a mouse monoclonal antibody raised against amino acids 1-152 mapping at the N-terminus of CCDC116 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CCDC116 (G-5) is available conjugated to agarose (sc-514528 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514528 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514528 PE), fluorescein (sc-514528 FITC), Alexa Fluor® 488 (sc-514528 AF488), Alexa Fluor® 546 (sc-514528 AF546), Alexa Fluor® 594 (sc-514528 AF594) or Alexa Fluor® 647 (sc-514528 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514528 AF680) or Alexa Fluor® 790 (sc-514528 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CCDC116 (G-5) is recommended for detection of CCDC116 of human origin by Western Blotting (starting dilution 1:100, 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).

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

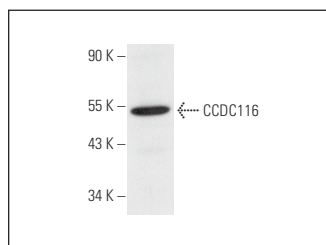
Molecular Weight of CCDC116 isoform 1/2: 57/68 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CCDC116 (G-5): sc-514528. Western blot analysis of CCDC116 expression in SK-N-MC whole cell lysate.

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 for detailed protocols and support products.

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