# SANTA CRUZ BIOTECHNOLOGY, INC.

# CCDC117 (E-16): sc-86360



## BACKGROUND

CCDC117 (coiled-coil domain-containing protein 117) is a 279 amino acid protein that is expressed as multiple alternatively spliced isoforms and is encoded by a gene which maps to human chromosome 22. Chromosome 22 houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

# REFERENCES

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- 2. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
- 3. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
- Paylor, R., Glaser, B., Mupo, A., Ataliotis, P., Spencer, C., Sobotka, A., Sparks, C., Choi, C.H., Oghalai, J., Curran, S., Murphy, K.C., Monks, S., Williams, N., O'Donovan, M.C., Owen, M.J., Scambler, P.J. and Lindsay, E. 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.
- Zheng, X., Güller, S., Beissert, T., Puccetti, E. and Ruthardt, M. 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.

## CHROMOSOMAL LOCATION

Genetic locus: CCDC117 (human) mapping to 22q12.1; Ccdc117 (mouse) mapping to 11 A1.

## SOURCE

CCDC117 (E-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CCDC117 of human origin.

## PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86360 P, (100  $\mu$ g 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.

#### **APPLICATIONS**

CCDC117 (E-16) is recommended for detection of CCDC117 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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.

CCDC117 (E-16) is also recommended for detection of CCDC117 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CCDC117 siRNA (h): sc-72822, CCDC117 siRNA (m): sc-142062, CCDC117 shRNA Plasmid (h): sc-72822-SH, CCDC117 shRNA Plasmid (m): sc-142062-SH, CCDC117 shRNA (h) Lentiviral Particles: sc-72822-V and CCDC117 shRNA (m) Lentiviral Particles: sc-142062-V.

Molecular Weight (predicted) of CCDC117 isoforms: 19/31 kDa.

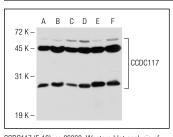
Molecular Weight (observed) of CCDC117: 22/45 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, T24 cell lysate: sc-2292 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunopre-cipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



CCDC117 (E-16): sc-86360. Western blot analysis of CCDC117 expression in HEK293 (A), T24 (B), NTERA-2 cl.D1 (C) and MES-SA/Dx5 (D) whole cell lysates and mouse lymph node (E) and mouse testis (F) tissue extracts.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.