SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC132 (A-4): sc-515794

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 7 is about 158 milllion bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia. CCDC132 (coiled-coil domain containing 132) is a 964 amino acid protein that is located on chromosome 7. Two isoforms of CCDC132 exist due to alternative splicing events.

REFERENCES

1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
3. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
4. Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? Cell. Mol. Life Sci. 63: 1867-1875.
5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126:113-128.

CHROMOSOMAL LOCATION

Genetic locus: VPS50 (human) mapping to 7q21.3.

SOURCE

CCDC132 (A-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 14-44 at the N-terminus of CCDC132 of human origin.

PRODUCT

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

CCDC132 (A-4) is available conjugated to agarose (sc-515794 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515794 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515794 PE), fluorescein (sc-515794 FITC), Alexa Fluor® 488 (sc-515794 AF488), Alexa Fluor® 546 (sc-515794 AF546), Alexa Fluor® 594 (sc-515794 AF594) or Alexa Fluor® 647 (sc-515794 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515794 AF680) or Alexa Fluor® 790 (sc-515794 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CCDC132 (A-4) is recommended for detection of CCDC132 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 CCDC132 siRNA (h): sc-89551, CCDC132 shRNA Plasmid (h): sc-89551-SH and CCDC132 shRNA (h) Lentiviral Particles: sc-89551-V.

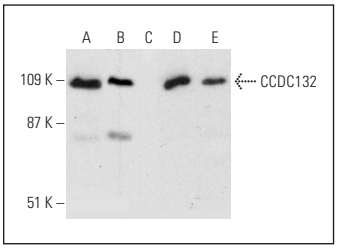
Molecular Weight of CCDC132: 111 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat whole cell lysate: sc-2204 or human testis extract: sc-363781.

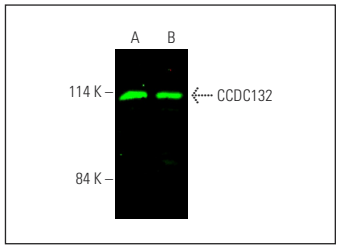
RECOMMENDED SUPPORT REAGENTS

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



CCDC132 (A-4): sc-515794. Western blot analysis of CCDC132 expression in HeLa nuclear extract (**A**), Jurkat (**B**) and NIH/3T3 (**C**) whole cell lysates and human adrenal cortex (**D**) and human testis (**E**) tissue extracts. Note lack of reactivity with mouse CCDC132 in lane **C**.



CCDC132 (A-4): sc-515794. Near-infrared western blot analysis of CCDC132 expression in HeLa nuclear extract (**A**) and Jurkat whole cell lysate (**B**). Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

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.