SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC114 (C-1): sc-398709

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CCDC114, also known as FLJ32926, is a 360 amino acid protein encoded by a gene mapping to human chromosome 19. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fcα receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene BCL3.

REFERENCES

1. Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. Cancer Res. 48: 2550-2554.
2. LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.
3. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
4. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.

CHROMOSOMAL LOCATION

Genetic locus: Ccdc114 (mouse) mapping to 7 B4.

SOURCE

CCDC114 (C-1) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of CCDC114 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CCDC114 (C-1) is available conjugated to agarose (sc-398709 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398709 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398709 PE), fluorescein (sc-398709 FITC), Alexa Fluor® 488 (sc-398709 AF488), Alexa Fluor® 546 (sc-398709 AF546), Alexa Fluor® 594 (sc-398709 AF594) or Alexa Fluor® 647 (sc-398709 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398709 AF680) or Alexa Fluor® 790 (sc-398709 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CCDC114 (C-1) is recommended for detection of CCDC114 of mouse 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 CCDC114 siRNA (m): sc-142059, CCDC114 shRNA Plasmid (m): sc-142059-SH and CCDC114 shRNA (m) Lentiviral Particles: sc-142059-V.

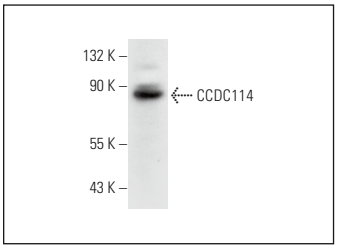
Molecular Weight of CCDC114 isoforms: 75/63/50 kDa.

Positive Controls: F9 cell lysate: sc-2245 or RAW 264.7 whole cell lysate: sc-2211.

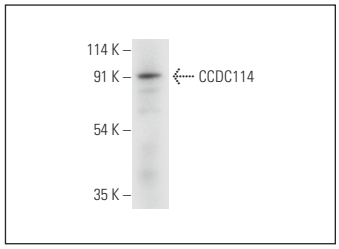
RECOMMENDED SUPPORT REAGENTS

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



CCDC114 (C-1): sc-398709. Western blot analysis of CCDC114 expression in F9 whole cell lysate.



CCDC114 (C-1): sc-398709. Western blot analysis of CCDC114 expression in RAW 264.7 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Zheng, R., et al. 2022. Dnah9 mutant mice and organoid models recapitulate the clinical features of patients with PCD and provide an excellent platform for drug screening. Cell Death Dis. 13: 559.

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.