SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC114 (E-8): sc-514763

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, spino-cerebellar 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 carcino-embryonic 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 (human) mapping to 19q13.33; Ccdc114 (mouse) mapping to 7 B4.

SOURCE

CCDC114 (E-8) is a mouse monoclonal antibody raised against amino acids 241-484 mapping within an internal region of CCDC114 of human 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 (E-8) is available conjugated to agarose (sc-514763 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514763 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514763 PE), fluorescein (sc-514763 FITC), Alexa Fluor® 488 (sc-514763 AF488), Alexa Fluor® 546 (sc-514763 AF546), Alexa Fluor® 594 (sc-514763 AF594) or Alexa Fluor® 647 (sc-514763 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514763 AF680) or Alexa Fluor® 790 (sc-514763 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CCDC114 (E-8) is recommended for detection of CCDC114 of mouse, rat and 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 CCDC114 siRNA (h): sc-97121, CCDC114 siRNA (m): sc-142059, CCDC114 shRNA Plasmid (h): sc-97121-SH, CCDC114 shRNA Plasmid (m): sc-142059-SH, CCDC114 shRNA (h) Lentiviral Particles: sc-97121-V and CCDC114 shRNA (m) Lentiviral Particles: sc-142059-V.

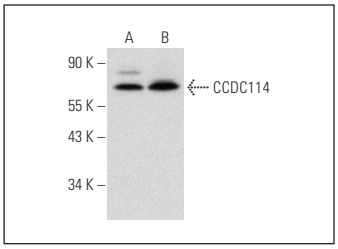
Molecular Weight of CCDC114 isoforms: 75/63/50 kDa.

Positive Controls: HT-1080 whole cell lysate: sc-364183, BYDP whole cell lysate: sc-364368 or Jurkat whole cell lysate: sc-2204.

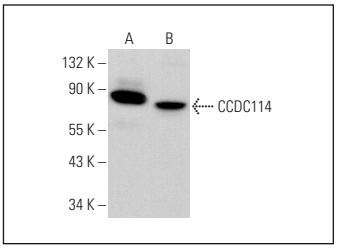
RECOMMENDED SUPPORT REAGENTS

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 (E-8): sc-514763. Western blot analysis of CCDC114 expression in HT-1080 (**A**) and Jurkat (**B**) whole cell lysates.



CCDC114 (E-8): sc-514763. Western blot analysis of CCDC114 expression in Jurkat (**A**) and BYDP (**B**) whole cell lysates.

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.