

CCDC93 (H-11): sc-514600

BACKGROUND

The coiled-coil domain is a structural motif found in proteins that are involved in a diverse array of biological functions such as the regulation of gene expression, cell division, membrane fusion, and drug extrusion and delivery. CCDC93 (coiled-coil domain containing 93) is a 631 amino acid protein that belongs to the CCDC93 family. CCDC93 is encoded by a gene located on human chromosome 2, which makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is related to mutations in the ALMS1 gene.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
5. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. *Dermatology* 215: 155-159.
6. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. *Hum. Mutat.* 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: CCDC93 (human) mapping to 2q14.1; Ccdc93 (mouse) mapping to 1 E2.3.

SOURCE

CCDC93 (H-11) is a mouse monoclonal antibody raised against amino acids 451-578 mapping near the C-terminus of CCDC93 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.

CCDC93 (H-11) is available conjugated to agarose (sc-514600 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514600 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514600 PE), fluorescein (sc-514600 FITC), Alexa Fluor® 488 (sc-514600 AF488), Alexa Fluor® 546 (sc-514600 AF546), Alexa Fluor® 594 (sc-514600 AF594) or Alexa Fluor® 647 (sc-514600 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514600 AF680) or Alexa Fluor® 790 (sc-514600 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CCDC93 (H-11) is recommended for detection of CCDC93 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 CCDC93 siRNA (h): sc-94511, CCDC93 siRNA (m): sc-142158, CCDC93 shRNA Plasmid (h): sc-94511-SH, CCDC93 shRNA Plasmid (m): sc-142158-SH, CCDC93 shRNA (h) Lentiviral Particles: sc-94511-V and CCDC93 shRNA (m) Lentiviral Particles: sc-142158-V.

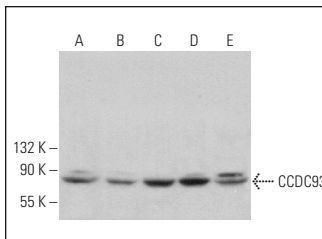
Molecular Weight of CCDC93: 73 kDa.

Positive Controls: JAR cell lysate: sc-2276, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

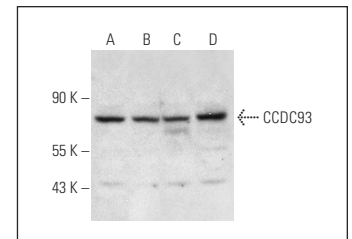
RECOMMENDED SUPPORT REAGENTS

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



CCDC93 (H-11): sc-514600. Western blot analysis of CCDC93 expression in HeLa (A), HEK293 (B), KNRK (C), AT3B-1 (D) and F9 (E) whole cell lysates.



CCDC93 (H-11): sc-514600. Western blot analysis of CCDC93 expression in JAR (A), HeLa (B), Hep G2 (C) and Jurkat (D) 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.

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