

CCDC33 (H-2): sc-390852

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. CCDC33 (coiled-coil domain containing 33), also known as CT61 (cancer/testis antigen 61), is a 958 amino acid protein found primarily in male germ cells. Existing as at least four alternatively spliced isoforms, CCDC33 is implicated in spermatogenesis and contains one C2 domain. CCDC33 is encoded by a gene located on human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

- Hurowitz, G.I., et al. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. *J. Neuropsychiatry Clin. Neurosci.* 5: 30-36.
- Woolfson, D.N. 2005. The design of coiled-coil structures and assemblies. *Adv. Protein Chem.* 70: 79-112.
- Midla, G.S. 2008. Diagnosis and management of patients with Marfan syndrome. *JAAPA* 21: 21-25.
- Kaczmarek, K., et al. 2009. CCDC33, a predominantly testis-expressed gene, encodes a putative peroxisomal protein. *Cytogenet. Genome Res.* 126: 243-252.
- Dan, B. 2009. Angelman syndrome: current understanding and research prospects. *Epilepsia* 50: 2331-2339.
- Ferrer-Bolufer, I., et al. 2009. Tyrosinemia type 1 and Angelman syndrome due to paternal uniparental isodisomy 15. *J. Inherit. Metab. Dis.* 32: S349-S353.

CHROMOSOMAL LOCATION

Genetic locus: CCDC33 (human) mapping to 15q24.1; *Ccdc33* (mouse) mapping to 9 B.

SOURCE

CCDC33 (H-2) is a mouse monoclonal antibody raised against amino acids 592-891 mapping near the C-terminus of CCDC33 of mouse 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.

CCDC33 (H-2) is available conjugated to agarose (sc-390852 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390852 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390852 PE), fluorescein (sc-390852 FITC), Alexa Fluor® 488 (sc-390852 AF488), Alexa Fluor® 546 (sc-390852 AF546), Alexa Fluor® 594 (sc-390852 AF594) or Alexa Fluor® 647 (sc-390852 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390852 AF680) or Alexa Fluor® 790 (sc-390852 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CCDC33 (H-2) is recommended for detection of CCDC33 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 CCDC33 siRNA (h): sc-90062, CCDC33 siRNA (m): sc-142103, CCDC33 shRNA Plasmid (h): sc-90062-SH, CCDC33 shRNA Plasmid (m): sc-142103-SH, CCDC33 shRNA (h) Lentiviral Particles: sc-90062-V and CCDC33 shRNA (m) Lentiviral Particles: sc-142103-V.

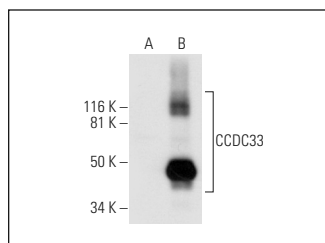
Molecular Weight of CCDC33: 114 kDa.

Positive Controls: CCDC33 (h): 293T Lysate: sc-114170, H4 cell lysate: sc-2408 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

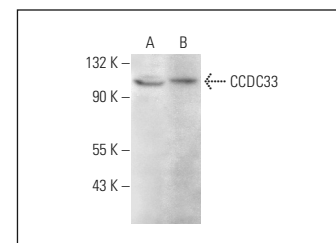
RECOMMENDED SUPPORT REAGENTS

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



CCDC33 (H-2): sc-390852. Western blot analysis of CCDC33 expression in non-transfected: sc-117752 (A) and human CCDC33 transfected: sc-114170 (B) 293T whole cell lysates.



CCDC33 (H-2): sc-390852. Western blot analysis of CCDC33 expression in NTERA-2 cl.D1 (A) and H4 (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.

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