SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC101 (D-1): sc-515286

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The Power to Question

BACKGROUND

CCDC101 (coiled-coil domain containing 101), also known as SGF29 (SAGA-associated factor 29) or STAF36, is a 293 amino acid nuclear protein that plays a role in transcriptional regulation by functioning as a subunit of two histone acetyltransferase complexes, namely, the TFTC (TATA-binding protein-free TAF-containing) and STAGA (SPT3-TAF9-GCN5/PCAF acetylase) complexes. A member of the SGF29 family, CCDC101 is encoded by a gene that maps to human chromosome 16p11.2. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
2. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.

CHROMOSOMAL LOCATION

Genetic locus: SGF29 (human) mapping to 16p11.2; Ccdc101 (mouse) mapping to 7 F3.

SOURCE

CCDC101 (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 40-59 within an internal region of CCDC101 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.

CCDC101 (D-1) is available conjugated to agarose (sc-515286 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515286 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515286 PE), fluorescein (sc-515286 FITC), Alexa Fluor® 488 (sc-515286 AF488), Alexa Fluor® 546 (sc-515286 AF546), Alexa Fluor® 594 (sc-515286 AF594) or Alexa Fluor® 647 (sc-515286 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515286 AF680) or Alexa Fluor® 790 (sc-515286 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CCDC101 (D-1) is recommended for detection of CCDC101 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 CCDC101 siRNA (h): sc-93367, CCDC101 siRNA (m): sc-142044, CCDC101 shRNA Plasmid (h): sc-93367-SH, CCDC101 shRNA Plasmid (m): sc-142044-SH, CCDC101 shRNA (h) Lentiviral Particles: sc-93367-V and CCDC101 shRNA (m) Lentiviral Particles: sc-142044-V.

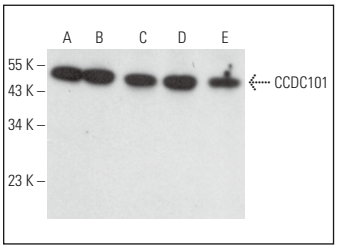
Molecular Weight of CCDC101: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MDA-MB-435S whole cell lysate: sc-364184 or CCDC101 (h): 293T Lysate: sc-113036.

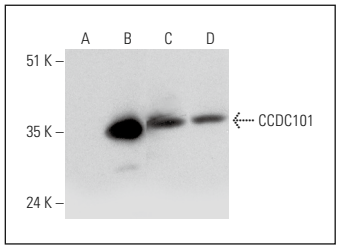
RECOMMENDED SUPPORT REAGENTS

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



CCDC101 (D-1): sc-515286. Western blot analysis of CCDC101 expression in HeLa (**A**), Daudi (**B**), NIH/3T3 (**C**) and Neuro-2A (**D**) whole cell lysates and rat testis tissue extract (**E**).



CCDC101 (D-1): sc-515286. Western blot analysis of CCDC101 expression in non-transfected 293T: sc-117752 (**A**), human CCDC101 transfected 293T: sc-113036 (**B**), MDA-MB-435S (**C**) and HeLa (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Yan, K., et al. 2023. SGF29 nuclear condensates reinforce cellular aging. Cell Discov. 9: 110.

RESEARCH USE

For research use only, not for use in diagnostic procedures.