SANTA CRUZ BIOTECHNOLOGY, INC.

Dcun1D3 (F-9): sc-514506

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dcun1D3 (Dcun1 domain-containing protein 3) is a 304 amino acid protein that contains one Dcun1 domain. The Dcun1 domain is an approximately 190 residue module that is thought to have the features of a basic helix-loop-helix leucine zipper domain, a domain commonly found in transcription factors. It has been suggested that Dcun1D3 may be involved in cell cycle progression and cell growth. The gene that encodes Dcun1D3 maps to human chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. 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. Chromosome 16 houses the CREBBP gene that encodes a critical CREB binding protein that is responsible for the Rubinstein-Taybi syndrome, a rare disorder characterized by mental retardation and predisposition to tumor growth and white blood cell neoplasias.

REFERENCES

1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
3. Kurz, T., et al. 2005. The conserved protein DCN-1/Dcn1p is required for cullin neddylation in *C. elegans* and *S. cerevisiae*. Nature 435: 1257-1261.
4. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
5. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.

CHROMOSOMAL LOCATION

Genetic locus: DCUN1D3 (human) mapping to 16p12.3; Dcun1d3 (mouse) mapping to 7 F2.

SOURCE

Dcun1D3 (F-9) is a mouse monoclonal antibody raised against amino acids 1-97 mapping at the N-terminus of Dcun1D3 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.

Dcun1D3 (F-9) is available conjugated to agarose (sc-514506 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514506 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514506 PE), fluorescein (sc-514506 FITC), Alexa Fluor® 488 (sc-514506 AF488), Alexa Fluor® 546 (sc-514506 AF546), Alexa Fluor® 594 (sc-514506 AF594) or Alexa Fluor® 647 (sc-514506 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514506 AF680) or Alexa Fluor® 790 (sc-514506 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Dcun1D3 (F-9) is recommended for detection of Dcun1D3 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 Dcun1D3 siRNA (h): sc-93018, Dcun1D3 siRNA (m): sc-142909, Dcun1D3 shRNA Plasmid (h): sc-93018-SH, Dcun1D3 shRNA Plasmid (m): sc-142909-SH, Dcun1D3 shRNA (h) Lentiviral Particles: sc-93018-V and Dcun1D3 shRNA (m) Lentiviral Particles: sc-142909-V.

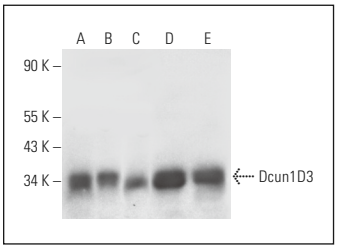
Molecular Weight of Dcun1D3: 34 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, OV-90 whole cell lysate: sc-364191 or human lung extract: sc-363767.

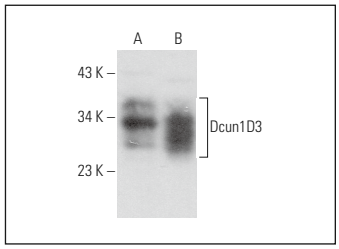
RECOMMENDED SUPPORT REAGENTS

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



Dcun1D3 (F-9): sc-514506. Western blot analysis of Dcun1D3 expression in human lung (**A**), human ovary (**B**) and human kidney (**C**) tissue extracts and ES-2 (**D**) and OV-90 (**E**) whole cell lysates.



Dcun1D3 (F-9): sc-514506. Western blot analysis of Dcun1D3 expression in ES-2 (**A**) and OVCAR-3 (**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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