SANTA CRUZ BIOTECHNOLOGY, INC.

RWDD2B (D-4): sc-514511

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RWDD2B (RWD domain containing protein 2B), also known as C21orf6, is a 319 amino acid protein that is ubiquitously expressed. RWDD2B contains one RWD domain, a conserved region of about 110 amino acid residues. RWD domains are found in many RING finger proteins, DEAD-like helicases and WD repeat containing proteins. It is believed that RWD domains may be involved in protein interaction. The gene that encodes RWDD2B maps to chromosome 21, which makes up about 1.5% of the human genome. Down syndrome, also known as trisomy 21, is the disease most commonly associated with chromosome 21. Alzheimer's disease, Jervell and Lange-Nielsen syndrome and amyotrophic lateral sclerosis are also associated with chromosome 21. Translocations are found to occur between chromosome 21 and 8, and chromosome 21 and 12, in certain leukemias.

REFERENCES

1. Tyson, J., et al. 1997. IsK and KvLQT1: mutation in either of the two subunits of the slow component of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen syndrome. Hum. Mol. Genet. 6: 2179-2185.
2. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
3. Orti, R., et al. 2000. Characterization of a novel gene, C21orf6, mapping to a critical region of chromosome 21q22.1 involved in the monosomy 21 phenotype and of its murine ortholog, orf5. Genomics 64: 203-210.
4. Doerks, T., et al. 2002. Systematic identification of novel protein domain families associated with nuclear functions. Genome Res. 12: 47-56.
5. Mao, R., et al. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. Genome Biol. 6: R107.
6. Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. J. Alzheimers Dis. 10: 453-455.

CHROMOSOMAL LOCATION

Genetic locus: RWDD2B (human) mapping to 21q21.3.

SOURCE

RWDD2B (D-4) is a mouse monoclonal antibody raised against amino acids 33-166 mapping near the N-terminus of RWDD2B 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.

RWDD2B (D-4) is available conjugated to agarose (sc-514511 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514511 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514511 PE), fluorescein (sc-514511 FITC), Alexa Fluor® 488 (sc-514511 AF488), Alexa Fluor® 546 (sc-514511 AF546), Alexa Fluor® 594 (sc-514511 AF594) or Alexa Fluor® 647 (sc-514511 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514511 AF680) or Alexa Fluor® 790 (sc-514511 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

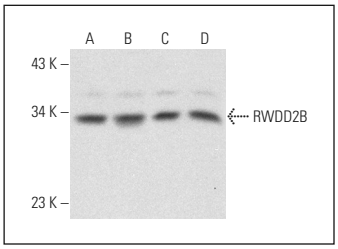
RWDD2B (D-4) is recommended for detection of RWDD2B of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: HeLa whole cell lysate: sc-2200, SK-N-MC cell lysate: sc-2237 or MES-SA/Dx5 cell lysate: sc-2284.

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



RWDD2B (D-4): sc-514511. Western blot analysis of RWDD2B expression in HeLa (**A**), SK-N-MC (**B**), MIA PaCa-2 (**C**) and MES-SA/Dx5 (**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.