SANTA CRUZ BIOTECHNOLOGY, INC.

WDR5B (E-6): sc-515077

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WDR5B (WD repeat domain 5B) is a 330 amino acid probable substrate receptor subunity of a CUL-RING E3 protein ligase complex, and has been found to interact with CUL-4B and DDB1. WDR5B belongs to the WD repeat WDR5/wds family and contains seven WD-repeats. WDR5B is encoded by gene located on human chromosome 3. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

1. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
2. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
3. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
4. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. Genomics 85: 36-47.
5. Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". Genomics 86: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: WDR5B (human) mapping to 3q21.1; Wdr5b (mouse) mapping to 16 B3.

SOURCE

WDR5B (E-6) is a mouse monoclonal antibody raised against amino acids 271-324 mapping near the C-terminus of WDR5B 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.

WDR5B (E-6) is available conjugated to agarose (sc-515077 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515077 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515077 PE), fluorescein (sc-515077 FITC), Alexa Fluor® 488 (sc-515077 AF488), Alexa Fluor® 546 (sc-515077 AF546), Alexa Fluor® 594 (sc-515077 AF594) or Alexa Fluor® 647 (sc-515077 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515077 AF680) or Alexa Fluor® 790 (sc-515077 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

WDR5B (E-6) is recommended for detection of WDR5B 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 WDR5B siRNA (h): sc-106704, WDR5B siRNA (m): sc-155300, WDR5B shRNA Plasmid (h): sc-106704-SH, WDR5B shRNA Plasmid (m): sc-155300-SH, WDR5B shRNA (h) Lentiviral Particles: sc-106704-V and WDR5B shRNA (m) Lentiviral Particles: sc-155300-V.

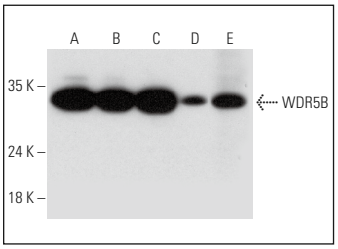
Molecular Weight of WDR5B: 36 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, WiDr cell lysate: sc-24779 or SH-SY5Y cell lysate: sc-3812.

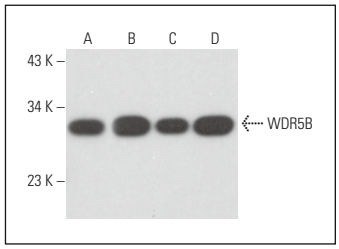
RECOMMENDED SUPPORT REAGENTS

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



WDR5B (E-6): sc-515077. Western blot analysis of WDR5B expression in SK-MEL-28 (**A**), WiDr (**B**) and SH-SY5Y (**C**) whole cell lysates and human thyroid (**D**) and human placenta (**E**) tissue extracts.



WDR5B (E-6): sc-515077. Western blot analysis of WDR5B expression in WiDr (**A**), HT-1080 (**B**), A-431 (**C**) and JAR (**D**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

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.