SANTA CRUZ BIOTECHNOLOGY, INC.

WDR92 (D-4): sc-393131

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. WDR92 (WD-repeat-containing protein 92), also known as WD repeat-containing protein Monad, is a 357 amino acid protein that contains six WD-repeats. Expressed in a variety of tissues, with highest levels present in testis, WDR92 is suggested to influence apoptosis. The gene encoding WDR92 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome and comprises nearly 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

1. Van der Voorn, L. and Ploegh, H.L. 1992. The WD-40 repeat. FEBS Lett. 307: 131-134.
2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
3. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
4. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. J. Med. Genet. 37: E8.
5. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (white) gene subfamily maps to human chromosome 2p21 in the region of the sitosterolemia locus. Cytogenet. Cell Genet. 92: 204-208.
6. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
7. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.

CHROMOSOMAL LOCATION

Genetic locus: WDR92 (human) mapping to 2p14; Wdr92 (mouse) mapping to 11 A2.

SOURCE

WDR92 (D-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 307-335 near the C-terminus of WDR92 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.

Blocking peptide available for competition studies, sc-393131 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

WDR92 (D-4) is recommended for detection of WDR92 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).

WDR92 (D-4) is also recommended for detection of WDR92 in additional species, including canine, porcine and avian.

Suitable for use as control antibody for WDR92 siRNA (h): sc-94404, WDR92 siRNA (m): sc-155329, WDR92 shRNA Plasmid (h): sc-94404-SH, WDR92 shRNA Plasmid (m): sc-155329-SH, WDR92 shRNA (h) Lentiviral Particles: sc-94404-V and WDR92 shRNA (m) Lentiviral Particles: sc-155329-V.

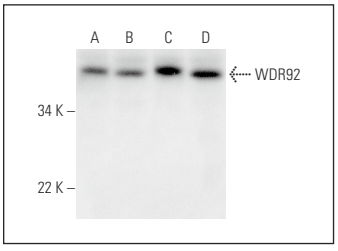
Molecular Weight of WDR92: 40 kDa.

Positive Controls: Sol8 nuclear extract: sc-2157, HL-60 whole cell lysate: sc-2209 or human testis extract: sc-363781.

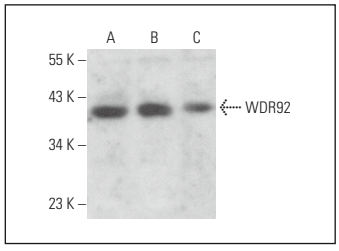
RECOMMENDED SUPPORT REAGENTS

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



WDR92 (D-4): sc-393131. Western blot analysis of WDR92 expression in HL-60 (**A**) and Hs 181 Tes (**B**) whole cell lysates, Sol8 nuclear extract (**C**) and human testis tissue extract (**D**).



WDR92 (D-4): sc-393131. Western blot analysis of WDR92 expression in HL-60 (**A**), F9 (**B**) and AT3B-1 (**C**) 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.