SANTA CRUZ BIOTECHNOLOGY, INC.

WDR70 (C-5): sc-398268



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, which 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 involving signal transduction, apoptosis, transcriptional regulation or cell cycle control. WD repeats serve as sites for protein-protein interaction and some seem to mediate the assembly of protein complexes. WDR70 (WD repeat-containing protein 70) is a 654 amino acid protein that contains seven WD repeats and belongs to the WD repeat GAD-1 family. WDR70 is encoded by a gene located on human chromosome 5q13.2.

REFERENCES

- 1. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
- 2. Garcia-Higuera, I., et al. 1996. Folding of proteins with WD-repeats: comparison of six members of the WD-repeat superfamily to the G protein β subunit. Biochemistry 35: 13985-13994.
- 3. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
- 4. Yu, L., et al. 2000. Thirty-plus functional families from a single motif. Protein Sci. 9: 2470-2476.
- 5. Li, D. and Roberts, R. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. Cell. Mol. Life Sci. 58: 2085-2097.
- 6. van Nocker, S. and Ludwig, P. 2003. The WD-repeat protein superfamily in Arabidopsis: conservation and divergence in structure and function. BMC Genomics 4: 50

CHROMOSOMAL LOCATION

Genetic locus: WDR70 (human) mapping to 5p13.2; Wdr70 (mouse) mapping to 15 A1.

SOURCE

WDR70 (C-5) is a mouse monoclonal antibody raised against amino acids 355-654 mapping at the C-terminus of WDR70 of human origin.

PRODUCT

Each vial contains 200 $\mu g~lg G_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

WDR70 (C-5) is available conjugated to agarose (sc-398268 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398268 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398268 PE), fluorescein (sc-398268 FITC), Alexa Fluor® 488 (sc-398268 AF488), Alexa Fluor® 546 (sc-398268 AF546), Alexa Fluor® 594 (sc-398268 AF594) or Alexa Fluor® 647 (sc-398268 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398268 AF680) or Alexa Fluor[®] 790 (sc-398268 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

WDR70 (C-5) is recommended for detection of WDR70 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 WDR70 siRNA (h): sc-91602, WDR70 siRNA (m): sc-155311, WDR70 shRNA Plasmid (h): sc-91602-SH, WDR70 shRNA Plasmid (m): sc-155311-SH, WDR70 shRNA (h) Lentiviral Particles: sc-91602-V and WDR70 shRNA (m) Lentiviral Particles: sc-155311-V.

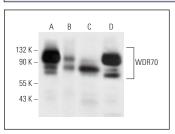
Molecular Weight of WDR70: 73 kDa.

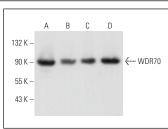
Positive Controls: HeLa whole cell lysate: sc-2200, RT-4 whole cell lysate: sc-364257 or U-251-MG whole cell lysate: sc-364176.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG K BP-HRP: sc-516102 or m-IgG K 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-IgGk BP-FITC: sc-516140 or m-IgGk 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





WDR70 (C-5): sc-398268. Western blot analysis of WDR70 expression in HeLa (A), HEK293T (B), RT-4 (C) and U-251-MG (D) whole cell lysates

WDR70 (C-5): sc-398268. Western blot analysis of WDR70 expression in HEK293 (A), KNRK (B), AT3B-1 (C) and NIH/3T3 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mirman, Z., et al. 2022. Expression of BRCA1, BRCA2, Rad51, and other DSB repair factors is regulated by CRL4^{WDR70}. DNA Repair 113: 103320.

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.