SANTA CRUZ BIOTECHNOLOGY, INC.

# WDR1 (B-10): sc-393159

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, 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, cell cycle control. WD repeats serve as sites for protein-protein interaction and some seem to mediate the assembly of protein complexes. With 11 WD repeats, WDR1 (WD repeat domain 1), also known as AIP1 or NORI-1, is a 606 amino acid protein that localizes to the cytoskeleton and is a member of the WD repeat AIP1 family. Existing as two alternatively spliced isoforms, WDR1 induces disassembly of Actin filaments in conjunction with ADF/cofilin family proteins.

## CHROMOSOMAL LOCATION

Genetic locus: WDR1 (human) mapping to 4p16.1; Wdr1 (mouse) mapping to 5 B3.

## SOURCE

WDR1 (B-10) is a mouse monoclonal antibody raised against amino acids 425-606 mapping at the C-terminus of WDR1 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.

WDR1 (B-10) is available conjugated to agarose (sc-393159 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393159 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393159 PE), fluorescein (sc-393159 FITC), Alexa Fluor® 488 (sc-393159 AF488), Alexa Fluor® 546 (sc-393159 AF546), Alexa Fluor® 594 (sc-393159 AF594) or Alexa Fluor® 647 (sc-393159 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393159 AF680) or Alexa Fluor® 790 (sc-393159 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

WDR1 (B-10) is recommended for detection of WDR1 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), immunohistochemistry (including paraffin-embedded sections) (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 WDR1 siRNA (h): sc-89063, WDR1 siRNA (m): sc-155255, WDR1 shRNA Plasmid (h): sc-89063-SH, WDR1 shRNA Plasmid (m): sc-155255-SH, WDR1 shRNA (h) Lentiviral Particles: sc-89063-V and WDR1 shRNA (m) Lentiviral Particles: sc-155255-V.

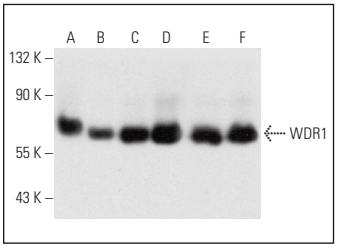
Molecular Weight of WDR1: 67 kDa.

Positive Controls: Sol8 cell lysate: sc-2249, C6 whole cell lysate: sc-364373 or NRK whole cell lysate: sc-364197.

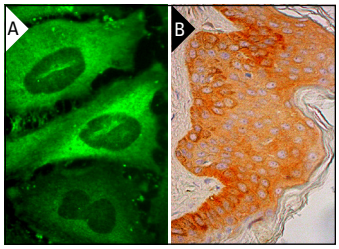
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA




WDR1 (B-10): sc-393159. Western blot analysis of WDR1 expression in HT-1080 (**A**), Raji (**B**), Jurkat (**C**), Sol8 (**D**), C6 (**E**) and NRK (**F**) whole cell lysates.




WDR1 (B-10): sc-393159. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes (**B**).

## SELECT PRODUCT CITATIONS

1. Bolger-Munro, M., et al. 2021. The WDR1-LIMK-Cofilin axis controls B cell antigen receptor-induced Actin remodeling and signaling at the immune synapse. Front. Cell Dev. Biol. 9: 649433.

## 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.