

WDR49 (E-9): sc-390195

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. Containing eight WD repeats, WDR49 (WD repeat-containing protein 49) is a 697 amino acid protein that is alternatively expressed as two isoforms. The gene encoding WDR49 maps to human chromosome 3, which is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

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.

CHROMOSOMAL LOCATION

Genetic locus: WDR49 (human) mapping to 3q26.1; Wdr49 (mouse) mapping to 3 E3.

SOURCE

WDR49 (E-9) is a mouse monoclonal antibody raised against a peptide mapping within an internal region of WDR49 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

WDR49 (E-9) is available conjugated to agarose (sc-390195 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390195 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390195 PE), fluorescein (sc-390195 FITC), Alexa Fluor[®] 488 (sc-390195 AF488), Alexa Fluor[®] 546 (sc-390195 AF546), Alexa Fluor[®] 594 (sc-390195 AF594) or Alexa Fluor[®] 647 (sc-390195 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390195 AF680) or Alexa Fluor[®] 790 (sc-390195 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390195 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

rabphilin-3A (E-2) is recommended for detection of rabphilin-3A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 rabphilin-3A siRNA (h): sc-106476, rabphilin-3A siRNA (m): sc-152671, rabphilin-3A shRNA Plasmid (h): sc-106476-SH, rabphilin-3A shRNA Plasmid (m): sc-152671-SH, rabphilin-3A shRNA (h) Lentiviral Particles: sc-106476-V and rabphilin-3A shRNA (m) Lentiviral Particles: sc-152671-V.

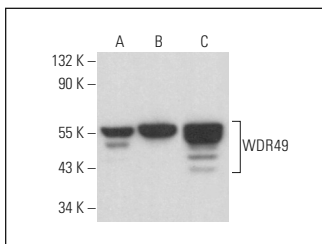
Molecular Weight of WDR49 isoforms: 79/59 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, L6 whole cell lysate: sc-364196 or K-562 whole cell lysate: sc-2203.

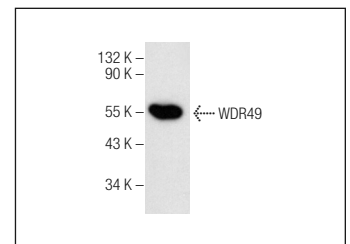
RECOMMENDED SUPPORT REAGENTS

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



WDR49 (E-9): sc-390195. Western blot analysis of WDR49 expression in Neuro-2A (A), 3T3-L1 (B) and L6 (C) whole cell lysates.



WDR49 (E-9): sc-390195. Western blot analysis of WDR49 expression in K-562 whole cell lysate.

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.