

WDR78 (E-2): sc-390401

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. WDR78 (WD repeat domain 78) is an 848 amino acid protein that contains six WD repeats and exists as three alternatively spliced isoforms. The gene encoding WDR78 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

CHROMOSOMAL LOCATION

Genetic locus: WDR78 (human) mapping to 1p31.3; Wdr78 (mouse) mapping to 4 C6.

SOURCE

WDR78 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 455-487 within an internal region of WDR78 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

WDR78 (E-2) is available conjugated to agarose (sc-390401 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390401 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390401 PE), fluorescein (sc-390401 FITC), Alexa Fluor® 488 (sc-390401 AF488), Alexa Fluor® 546 (sc-390401 AF546), Alexa Fluor® 594 (sc-390401 AF594) or Alexa Fluor® 647 (sc-390401 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390401 AF680) or Alexa Fluor® 790 (sc-390401 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390401 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

WDR78 (E-2) is recommended for detection of WDR78 isoforms 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 WDR78 siRNA (h): sc-78584, WDR78 siRNA (m): sc-155318, WDR78 shRNA Plasmid (h): sc-78584-SH, WDR78 shRNA Plasmid (m): sc-155318-SH, WDR78 shRNA (h) Lentiviral Particles: sc-78584-V and WDR78 shRNA (m) Lentiviral Particles: sc-155318-V.

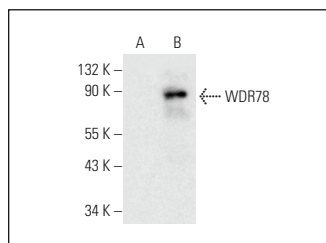
Molecular Weight of WDR78 isoforms: 95/57/63 kDa.

Positive Controls: WDR78 (m2): 293T Lysate: sc-126238.

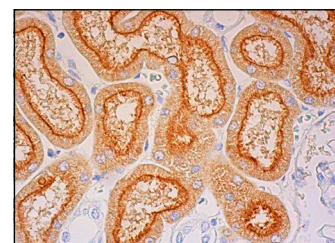
RECOMMENDED SUPPORT REAGENTS

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



WDR78 (E-2): sc-390401. Western blot analysis of WDR78 expression in non-transfected: sc-117752 (A) and mouse WDR78 transfected: sc-126238 (B) 293T whole cell lysates.



WDR78 (E-2): sc-390401. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing apical membrane and cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

1. Lu, S., et al. 2021. Bi-allelic variants in human WDR63 cause male infertility via abnormal inner dynein arms assembly. *Cell Discov.* 7: 110.

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.

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