SANTA CRUZ BIOTECHNOLOGY, INC.

WDR74 (D-19): sc-244643

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. WDR74 (WD repeat domain 74), also known as NOP seven-associated protein 1 (NSA1), is a 385 amino acid protein that localizes to the nucleolus and contains six WD repeats. Existing as two alternatively spliced isoforms, the gene encoding WDR74 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome and Niemann-Pick disease are associated with defects in genes that maps to chromosome 11.

CHROMOSOMAL LOCATION

Genetic locus: WDR74 (human) mapping to 11q12.3; Wdr74 (mouse) mapping to 19 A.

SOURCE

WDR74 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WDR74 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244643 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

WDR74 (D-19) is recommended for detection of WDR74 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other WDR family members.

WDR74 (D-19) is also recommended for detection of WDR74 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for WDR74 siRNA (h): sc-96959, WDR74 siRNA (m): sc-155314, WDR74 shRNA Plasmid (h): sc-96959-SH, WDR74 shRNA Plasmid (m): sc-155314-SH, WDR74 shRNA (h) Lentiviral Particles: sc-96959-V and WDR74 shRNA (m) Lentiviral Particles: sc-155314-V.

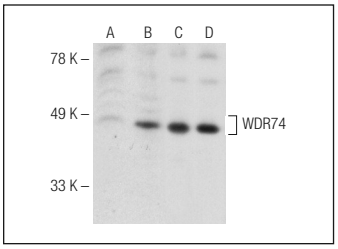
Molecular Weight of WDR74: 42 kDa.

Positive Controls: WDR74 (m): 293T Lysate: sc-124636, IMR-32 whole cell lysate or K-562 whole cell lysate: sc-2203.

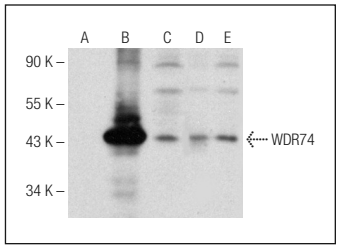
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



WDR74 (D-19): sc-244643. Western blot analysis of WDR74 expression in non-transfected: sc-117752 (**A**) and human WDR74 transfected: sc-371053 (**B**) whole cell lysates and HeLa (**C**) and K-562 (**D**) nuclear extracts.



WDR74 (D-19): sc-244643. Western blot analysis of WDR74 expression in non-transfected 293T: sc-117752 (**A**), mouse WDR74 transfected 293T: sc-124636 (**B**) and IMR-32 (**C**) whole cell lysates and K-562 (**D**) and Jurkat (**E**) nuclear extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.