

# WDR4 (P-17): sc-83347

## 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. WDR4 (WD-repeat-containing protein 4), also known as TRM82, is a 412 amino acid protein that contains two WD-repeats. Expressed as multiple isoforms due to alternative splicing events, WDR4 forms a complex with METTL1 (methyltransferase like 1) that is necessary for the 7-methylguanosine modification of tRNA. Defects in the gene encoding WDR4 may be associated with the development of Down syndrome, a chromosomal disorder characterized by deformed physical features and mental retardation.

## CHROMOSOMAL LOCATION

Genetic locus: WDR4 (human) mapping to 21q22.3; Wdr4 (mouse) mapping to 17 B1.

## SOURCE

WDR4 (P-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of WDR4 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83347 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

WDR4 (P-17) is recommended for detection of WDR4 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 family member WDR5.

WDR4 (P-17) is also recommended for detection of WDR4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WDR4 siRNA (h): sc-91529, WDR4 siRNA (m): sc-155281, WDR4 shRNA Plasmid (h): sc-91529-SH, WDR4 shRNA Plasmid (m): sc-155281-SH, WDR4 shRNA (h) Lentiviral Particles: sc-91529-V and WDR4 shRNA (m) Lentiviral Particles: sc-155281-V.

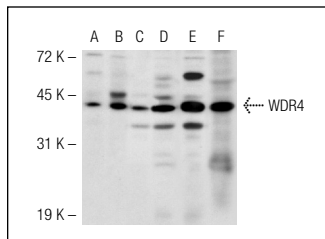
Molecular Weight of WDR4: 45 kDa.

Positive Controls: WDR4 (m): 293T Lysate: sc-124624, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



WDR4 (P-17): sc-83347. Western blot analysis of WDR4 expression in non-transfected 293T: sc-117752 (A), mouse WDR4 transfected 293T: sc-124624 (B), HeLa (C) and MIA PaCa-2 (D) whole cell lysates and HeLa nuclear extract (E) and mouse pancreas tissue extract (F).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **WDR4 (321.9): sc-100894**, our highly recommended monoclonal alternative to WDR4 (P-17).