

# WDR41 (S-12): sc-137922

## 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. WDR41 (WD repeat-containing protein 41) is a 459 amino acid protein that contains 6 WD repeats. WDR41 is encoded by a gene located on human chromosome 5q13.3.

## 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  $\beta$  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.
5. Li, D. and Roberts, R. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. *Cell. Mol. Life Sci.* 58: 2085-2097.
6. van Nocker, S. and Ludwig, P. 2003. The WD-repeat protein superfamily in *Arabidopsis*: conservation and divergence in structure and function. *BMC Genomics* 4: 50.
7. Hudson, A.M. and Cooley, L. 2008. Phylogenetic, structural and functional relationships between WD- and Kelch-repeat proteins. *Subcell. Biochem.* 48: 6-19.

## CHROMOSOMAL LOCATION

Genetic locus: WDR41 (human) mapping to 5q13.3; Wdr41 (mouse) mapping to 13 D1.

## SOURCE

WDR41 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of WDR41 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137922 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

WDR41 (S-12) is recommended for detection of WDR41 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other WDR family members.

WDR41 (S-12) is also recommended for detection of WDR41 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WDR41 siRNA (h): sc-91591, WDR41 siRNA (m): sc-155285, WDR41 shRNA Plasmid (h): sc-91591-SH, WDR41 shRNA Plasmid (m): sc-155285-SH, WDR41 shRNA (h) Lentiviral Particles: sc-91591-V and WDR41 shRNA (m) Lentiviral Particles: sc-155285-V.

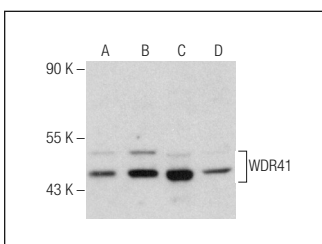
Molecular Weight of WDR41: 52 kDa.

Positive Controls: WDR41 (h): 293T Lysate: sc-113507, MDA-MB-468 cell lysate: sc-2282 or FHs 74 Int whole cell lysate.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



WDR41 (S-12): sc-137922. Western blot analysis of WDR41 expression in non-transfected 293T: sc-117752 (A), human WDR41 transfected 293T: sc-113507 (B), MDA-MB-468 (C) and FHs 74 Int (D) whole cell lysates.

## STORAGE

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