

WDR70 (D-13): sc-137930

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 or cell cycle control. WD repeats serve as sites for protein-protein interaction and some seem to mediate the assembly of protein complexes. WDR70 (WD repeat-containing protein 70) is a 654 amino acid protein that contains seven WD repeats and belongs to the WD repeat GAD-1 family. WDR70 is encoded by a gene located on human chromosome 5q13.2.

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: WDR70 (human) mapping to 5p13.2; Wdr70 (mouse) mapping to 15 A1.

SOURCE

WDR70 (D-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of WDR70 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-137930 P, (100 µg 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

WDR70 (D-13) is recommended for detection of WDR70 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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.

WDR70 (D-13) is also recommended for detection of WDR70 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for WDR70 siRNA (h): sc-91602, WDR70 siRNA (m): sc-155311, WDR70 shRNA Plasmid (h): sc-91602-SH, WDR70 shRNA Plasmid (m): sc-155311-SH, WDR70 shRNA (h) Lentiviral Particles: sc-91602-V and WDR70 shRNA (m) Lentiviral Particles: sc-155311-V.

Molecular Weight of WDR70: 73 kDa.

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) 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.

STORAGE

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

PROTOCOLS

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