

WDR68 (S-15): sc-160914

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. WDR68 (WD repeat-containing protein 68), also known as DCAF7 (DDB1- and CUL4-associated factor 7), HAN11 or WDR68, is a 342 amino acid protein that belongs to the WD repeat DCAF7 family and contains 4 WD repeats. Localizing to the cytoplasm and nucleus, WDR68 is involved in protein modification and ubiquitination pathways, and interacts directly with Dyrk1A, Dyrk1B and Dia 1. WDR68 is involved in craniofacial development, and may be involved in skin development.

REFERENCES

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2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. *Nature* 371: 297-300.
3. de Vetten, N., et al. 1997. The an11 locus controlling flower pigmentation in petunia encodes a novel WD-repeat protein conserved in yeast, plants, and animals. *Genes Dev.* 11: 1422-1434.
4. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. *Trends Biochem. Sci.* 24: 181-185.
5. Skurat, A.V. and Dietrich, A.D. 2004. Phosphorylation of Ser640 in muscle glycogen synthase by DYRK family protein kinases. *J. Biol. Chem.* 279: 2490-2498.
6. Morita, K., et al. 2006. HAN11 binds mDia1 and controls GLI1 transcriptional activity. *J. Dermatol. Sci.* 44: 11-20.
7. Miyata, Y. and Nishida, E. 2011. DYRK1A binds to an evolutionarily conserved WD40-repeat protein WDR68 and induces its nuclear translocation. *Biochim. Biophys. Acta* 1813: 1728-1739.

CHROMOSOMAL LOCATION

Genetic locus: DCAF7 (human) mapping to 17q23.3; Dcaf7 (mouse) mapping to 11 E1.

SOURCE

WDR68 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WDR68 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-160914 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WDR68 (S-15) is recommended for detection of WDR68 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

WDR68 (S-15) is also recommended for detection of WDR68 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for WDR68 siRNA (h): sc-93712, WDR68 siRNA (m): sc-155308, WDR68 shRNA Plasmid (h): sc-93712-SH, WDR68 shRNA Plasmid (m): sc-155308-SH, WDR68 shRNA (h) Lentiviral Particles: sc-93712-V and WDR68 shRNA (m) Lentiviral Particles: sc-155308-V.

Molecular Weight of WDR68: 39 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.