

# WDR20 (N-16): sc-165892

## 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. WDR20 (WD-repeat-containing protein 20), also known as DMR, is a 569 amino acid protein that contains 5 WD-repeats and may be involved in signaling networks throughout the cell. Due to alternative splicing events, two isoforms of WDR20 are expressed.

## REFERENCES

1. van der Voorn, L., et al. 1992. The WD-40 repeat. FEBS Lett. 307: 131-134.
2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
3. 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.
4. Garcia-Higuera, I., et al. 1998. Folding a WD repeat propeller. Role of highly conserved aspartic acid residues in the G protein  $\beta$  subunit and Sec13. J. Biol. Chem. 273: 9041-9049.
5. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
6. Li, D., et al. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. Cell. Mol. Life Sci. 58: 2085-2097.
7. Olsen, J.V., et al. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. Cell 127: 635-648.

## CHROMOSOMAL LOCATION

Genetic locus: WDR20 (human) mapping to 14q32.31; Wdr20a (mouse) mapping to 12 F1, Wdr20b (mouse) mapping to 12 C1.

## SOURCE

WDR20 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WDR20 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165892 P, (100  $\mu$ g 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

WDR20 (N-16) is recommended for detection of WDR20 of human origin and WDR20a and WDR20b of mouse 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.

WDR20 (N-16) is also recommended for detection of WDR20 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for WDR20 siRNA (h): sc-92396, WDR20 shRNA Plasmid (h): sc-92396-SH and WDR20 shRNA (h) Lentiviral Particles: sc-92396-V.

Molecular Weight of WDR20: 63 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

## 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.

## 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.