SANTA CRUZ BIOTECHNOLOGY, INC.

WDR96 (D-19): sc-241980



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. WDR96 (WD repeat domain 96) is a 1,665 amino acid protein that contains 9 WD repeats and exists as 5 alternatively spliced isoforms. The gene encoding WDR96 maps to human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome.

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 β subunit. Biochemistry 35: 13985-13994.
- Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
- 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.
- Koshizuka, Y., et al. 2001. Isolation, characterization, and mapping of the mouse and human WDR8 genes, members of a novel WD-repeat gene family. Genomics 72: 252-259.
- Hudson, A.M., et al. 2008. Phylogenetic, structural and functional relationships between WD- and Kelch-repeat proteins. Subcell. Biochem. 48: 6-19.

CHROMOSOMAL LOCATION

Genetic locus: WDR96 (human) mapping to 10q25.1; Wdr96 (mouse) mapping to 19 D1.

SOURCE

WDR96 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WDR96 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-241980 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

WDR96 (D-19) is recommended for detection of WDR96 of mouse, rat and human 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).

WDR96 (D-19) is also recommended for detection of WDR96 in additional species, including equine and bovine.

Suitable for use as control antibody for WDR96 siRNA (h): sc-90764, WDR96 siRNA (m): sc-142798, WDR96 shRNA Plasmid (h): sc-90764-SH, WDR96 shRNA Plasmid (m): sc-142798-SH, WDR96 shRNA (h) Lentiviral Particles: sc-90764-V and WDR96 shRNA (m) Lentiviral Particles: sc-142798-V.

Molecular Weight of WDR96: 192 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) Immunofluo-rescence: 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 or our catalog for detailed protocols and support products.