SANTA CRUZ BIOTECHNOLOGY, INC.

WDR21C (N-17): sc-98200



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 and cell cycle control. WD repeats serve as sites for protein-protein interaction and some seem to mediate the assembly of protein complexes. WDR21C (WD repeat-containing protein 21C) is a 395 amino acid protein that contains two WD repeats. The gene encoding WDR21C maps to human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

- Neer, E.J., Schmidt, C.J., Nambudripad, R. and Smith, T.F. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
- 2. Garcia-Higuera, I., Fenoglio, J., Li, Y., Lewis, C., Panchenko, M.P., Reiner, O., Smith, T.F. and Neer, E.J. 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.
- 3. Smith, T.F., Gaitatzes, C., Saxena, K. and Neer, E.J. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
- 4. Yu, L., Gaitatzes, C., Neer, E. and Smith, T.F. 2000. Thirty-plus functional families from a single motif. Protein Sci. 9: 2470-2476.
- 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.
- 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.
- Dephoure, N., Zhou, C., Villen, J., Beausoleil, S.A., Bakalarski, C.E., Elledge, S.J. and Gygi, S.P. 2008. A quantitative atlas of mitotic phosphorylation. Proc. Natl. Acad. Sci. USA 105: 10762-10767.
- 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: WDR21C (human) mapping to 8q21.3.

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.

SOURCE

WDR21C (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WDR21C of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98200 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WDR21C (N-17) is recommended for detection of WDR21C of 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.

Suitable for use as control antibody for WDR21C siRNA (h): sc-77464, WDR21C shRNA Plasmid (h): sc-77464-SH and WDR21C shRNA (h) Lentiviral Particles: sc-77464-V.

Molecular Weight of WDR21C: 44 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-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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