SANTA CRUZ BIOTECHNOLOGY, INC.

WDR13 (1G9): sc-517175

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD repeat containing protein 13 (WDR13) is a 485 amino acid protein that is widely expressed in various adult and fetal tissues. 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. The gene encoding WDR13, which maps to chromosome Xp11.23, contains nine exons, eight introns and six WD-repeats. The subcellular localization of the WDR13 protein in the nucleus suggests that it may have a regulatory function. Two isoforms of this protein exist as a result of alternative splicing events.

REFERENCES

1. Claudio, J.O., et al. 1999. Cloning and expression analysis of a novel WD repeat gene, WDR3, mapping to 1p12-p13. Genomics 59: 85-89.
2. Di Benedetto, A.J., et al. 2001. Cloning and molecular characterization of a novel gene encoding a WD-repeat protein expressed in restricted areas of adult rat brain. Gene 271: 21-31.
3. 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.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300512. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Singh, B.N., et al. 2003. A highly conserved human gene encoding a novel member of WD-repeat family of proteins (WDR13). Genomics 81: 315-328.
6. Suresh, A., et al. 2005. A mouse gene encoding a novel member of the WD family of proteins is highly conserved and predominantly expressed in the testis (WDR13). Mol. Reprod. Dev. 72: 299-310.
7. Philipps, D.L., et al. 2008. The dual bromodomain and WD repeat-containing mouse protein BRWD1 is required for normal spermiogenesis and the oocyte-embryo transition. Dev. Biol. 317: 72-82.

CHROMOSOMAL LOCATION

Genetic locus: WDR13 (human) mapping to Xp11.23; Wdr13 (mouse) mapping to X A1.1.

SOURCE

WDR13 (1G9) is a mouse monoclonal antibody raised against amino acids 391-484 representing partial length WDR13 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

WDR13 (1G9) is recommended for detection of WDR13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

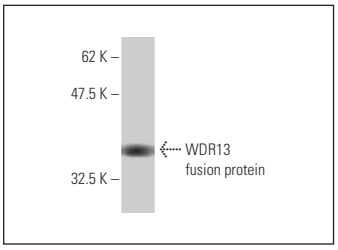
Suitable for use as control antibody for WDR13 siRNA (h): sc-91315, WDR13 siRNA (m): sc-155258, WDR13 shRNA Plasmid (h): sc-91315-SH, WDR13 shRNA Plasmid (m): sc-155258-SH, WDR13 shRNA (h) Lentiviral Particles: sc-91315-V and WDR13 shRNA (m) Lentiviral Particles: sc-155258-V.

Molecular Weight of WDR13: 53 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



WDR13 (1G9): sc-517175. Western blot analysis of human recombinant WDR13 fusion protein.

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 for detailed protocols and support products.