SANTA CRUZ BIOTECHNOLOGY, INC.

WDR79 (S-18): sc-244647

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. WDR79 (WD repeat-containing protein 79), also known as TCAB1 or WRAP53, is a 548 amino acid nuclear protein that is expressed in all tissues. WDR79 is a component of the telomerase holoenzyme complex, which is a ribonucleoprotein complex that is essential for replication of chromosome termini that elongates telomeres in most eukaryotes and controls telomerase localization to Cajal body. The mRNA encoding WDR79 plays a critical role in maintaining basal p53 mRNA levels and in p53 induction upon DNA damage.

REFERENCES

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5. Mahmoudi, S., Henriksson, S., Corcoran, M., Mεndez-Vidal, C., Wiman, K.G. and Farnebo, M. 2009. Wrap53, a natural p53 antisense transcript required for p53 induction upon DNA damage. Mol. Cell 33: 462-471.
6. Tycowski, K.T., Shu, M.D., Kukoyi, A. and Steitz, J.A. 2009. A conserved WD40 protein binds the Cajal body localization signal of scaRNP particles. Mol. Cell 34: 47-57.

CHROMOSOMAL LOCATION

Genetic locus: WRAP53 (human) mapping to 17p13.1; Wrap53 (mouse) mapping to 11 B3.

SOURCE

WDR79 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WDR79 of human origin.

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 or our catalog for detailed protocols and support products.

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-244647 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WDR79 (S-18) is recommended for detection of WDR79 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)], 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.

WDR79 (S-18) is also recommended for detection of WDR79 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WDR79 siRNA (h): sc-93974, WDR79 siRNA (m): sc-155319, WDR79 shRNA Plasmid (h): sc-93974-SH, WDR79 shRNA Plasmid (m): sc-155319-SH, WDR79 shRNA (h) Lentiviral Particles: sc-93974-V and WDR79 shRNA (m) Lentiviral Particles: sc-155319-V.

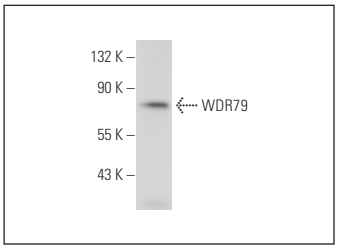
Molecular Weight of WDR79: 59 kDa.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



WDR79 (S-18): sc-244647. Western blot analysis of WDR79 expression in HeLa nuclear extract.

RESEARCH USE

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