SANTA CRUZ BIOTECHNOLOGY, INC.

WDR5 (H-35): sc-135245

BACKGROUND

WD-repeat protein 5 (WDR5, also designated BMP-2-induced gene 3 kb or BIG-3) belongs to the family of WD-40 repeat proteins, and is essential for vertebrate development, Hox gene activation and global H3K4 trimethylation. WDR5 is a conserved subunit of Trithorax (TRX) histone methyltransferase complexes that selectively binds to dimethylated Lys4 (K4me2) in histone H3 to promote K4 trimethylation by TRX. It is expressed in osteoblasts, chondrocytes, osteocytes and marrow stromal cells. The WDR5 protein contains seven WD repeats, which may play a role in its function of accelerating osteoblast differentiation.

REFERENCES

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3. Couture, J.F., Collazo, E. and Trievel, R.C. 2006. Molecular recognition of Histone H3 by the WD40 protein WDR5. Nat. Struct. Mol. Biol. 13: 698-703.
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7. Han, Z., Guo, L., Wang, H., Shen, Y., Deng, X.W. and Chai, J. 2006. Structural basis for the specific recognition of methylated Histone H3 lysine 4 by the WD-40 protein WDR5. Mol. Cell 22: 137-144.

CHROMOSOMAL LOCATION

Genetic locus: WDR5 (human) mapping to 9q34.2; Wdr5 (mouse) mapping to 2 A3.

SOURCE

WDR5 (H-35) is a rabbit polyclonal antibody raised against amino acids 1-35 mapping at the N-terminus of WDR5 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.

RESEARCH USE

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

APPLICATIONS

WDR5 (H-35) is recommended for detection of WDR5 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).

WDR5 (H-35) is also recommended for detection of WDR5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WDR5 siRNA (h): sc-61798, WDR5 siRNA (m): sc-61799, WDR5 shRNA Plasmid (h): sc-61798-SH, WDR5 shRNA Plasmid (m): sc-61799-SH, WDR5 shRNA (h) Lentiviral Particles: sc-61798-V and WDR5 shRNA (m) Lentiviral Particles: sc-61799-V.

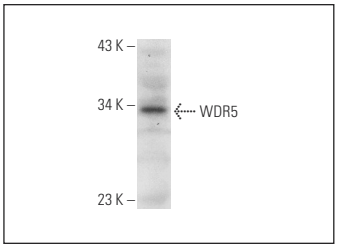
Molecular Weight of WDR5: 34 kDa.

Positive Controls: Hs 181 Tes whole cell lysate: sc-364779.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



WDR5 (H-35): sc-135245. Western blot analysis of WDR5 expression in Hs 181 Tes whole cell lysate.

STORAGE

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