SANTA CRUZ BIOTECHNOLOGY, INC.

WBSCR27 (C-15): sc-137906

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Williams-Beuren syndrome (WBS) is a developmental disorder caused by the hemizygous microdeletion on chromosome 7q11.23. WBS is an autosomal dominant genetic condition that is characterized by physical, cognitive and behavioral traits. The physical traits associated with WBS include facial dysmorphology, vascular stenoses, growth deficiencies, dental anomalies and neurologic and musculoskeletal abnormalities. Mild retardation, a weakness in visual-spatial skills, anxiety and a short attention span are typical cognitive and behavioral traits of WBS patients. The WBSCR27 gene is located within the WBS deletion and may contribute to the developmental symptoms found in WBS because of a loss of the encoded transcription factor. WBSCR27 (Williams-Beuren syndrome chromosomal region 27 protein) is a 245 amino acid protein and is encoded by a gene located on human chromosome 7q11.23. Certain cardiovascular and musculoskeletal abnormalities may be the result of haploinsufficiency of WBSCR27.

REFERENCES

1. Morris, C.A., et al. 1988. Natural history of Williams syndrome: physical characteristics. J. Pediatr. 113: 318-326.
2. Pober, B.R. and Dykens, E.M. 1996. Child Aldolesc. Psychiatr. Clin. North Am. 5: 929-943.
3. Lashkari, A., et al. 1999. Williams-Beuren syndrome: an update and review for the primary physician. Clin. Pediatr. 38: 189-208.
4. Bellugi, U., et al. 1999. Bridging cognition, the brain and molecular genetics: evidence from Williams syndrome. Trends Neurosci. 22: 197-207.
5. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
6. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
7. Micale, L., et al. 2008. Williams-Beuren syndrome TRIM50 encodes an E3 ubiquitin ligase. Eur. J. Hum. Genet. 16: 1038-1049.

CHROMOSOMAL LOCATION

Genetic locus: WBSCR27 (human) mapping to 7q11.23.

SOURCE

WBSCR27 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of WBSCR27 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-137906 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

WBSCR27 (C-15) is recommended for detection of WBSCR27 of 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 WBSCR family members.

Suitable for use as control antibody for WBSCR27 siRNA (h): sc-89703, WBSCR27 shRNA Plasmid (h): sc-89703-SH and WBSCR27 shRNA (h) Lentiviral Particles: sc-89703-V.

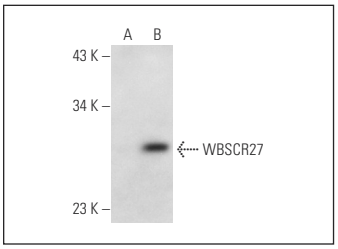
Molecular Weight of WBSCR27: 27 kDa.

Positive Controls: WBSCR27 (h2): 293T Lysate: sc-114738.

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



WBSCR27 (C-15): sc-137906. Western blot analysis of WBSCR27 expression in non-transfected: sc-117752 (**A**) and human WBSCR27 transfected: sc-114738 (**B**) 293T whole cell lysates.

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.