SANTA CRUZ BIOTECHNOLOGY, INC.

WBSCR11 (M-19): sc-14714

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 WBSCR11 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. WBSCR11 is also designated GRF2IRD1, GTF3, Cream1, and MusTRD1 in human and BEN in mouse, due to slight differences in gene structure. WBSCR11 is expressed in all adult tissues as several variants and has discrete spatial and temporal expression during embryogenesis. The amino terminus of WBSCR11 interacts with transcriptional machinery proteins, while the carboxy terminus has been shown to bind the retinoblastoma protein to possibly regulate the cell cycle.

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. Williams syndrome: an overview of medical, cognitive, and behavioral features. Child Adolesc. Psychiatr. Clin. N. 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.

CHROMOSOMAL LOCATION

Genetic locus: GTF2IRD1 (human) mapping to 7q11.23; Gtf2ird1 (mouse) mapping to 5 G2.

SOURCE

WBSCR11 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WBSCR11 of mouse 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-14714 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

WBSCR11 (M-19) is recommended for detection of WBSCR11 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).

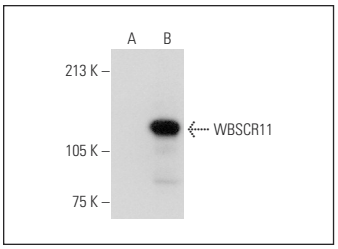
WBSCR11 (M-19) is also recommended for detection of WBSCR11 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WBSCR11 siRNA (h): sc-38621, WBSCR11 siRNA (m): sc-38622, WBSCR11 shRNA Plasmid (h): sc-38621-SH, WBSCR11 shRNA Plasmid (m): sc-38622-SH, WBSCR11 shRNA (h) Lentiviral Particles: sc-38621-V and WBSCR11 shRNA (m) Lentiviral Particles: sc-38622-V.

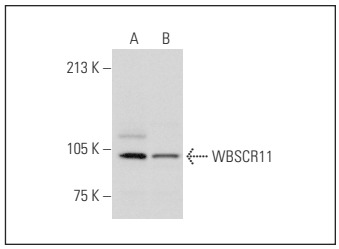
WBSCR11 (M-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: HeLa whole cell lysate: sc-2200, WBSCR11 (h): 293 Lysate: sc-113214 or HEK293 whole cell lysate: sc-45136.

DATA



WBSCR11 (M-19): sc-14714. Western blot analysis of WBSCR11 expression in non-transfected: sc-117750 (**A**) and human WBSCR11 transfected: sc-113214 (**B**) whole cell lysates.



WBSCR11 (M-19): sc-14714. Western blot analysis of WBSCR11 expression in HEK293 (**A**) and HeLa (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chimge, N.O., et al. 2008. Identification of the TFII-I family target genes in the vertebrate genome. Proc. Natl. Acad. Sci. USA 105: 9006-9010.
2. Palmer, S.J., et al. 2010. Negative autoregulation of GTF2IRD1 in Williams-Beuren syndrome via a novel DNA binding mechanism. J. Biol. Chem. 285: 4715-4724.

PROTOCOLS

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