SANTA CRUZ BIOTECHNOLOGY, INC.

WBSCR22 (C-16): sc-163519

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Williams-Beuren syndrome (WBS) is a developmental disorder caused by a hemizygous microdeletion on chromosome 7q11.23. WBS is an autosomal dominant genetic condition that is characterized by abnormal 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, weakness in visual-spatial skills, anxiety and a short attention span are typical cognitive and behavioral traits of WBS patients. The WBSCR22 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. WBSCR22 (Williams-Beuren syndrome chromosomal region 22 protein), also known as HUSSY-3, PP3381 or WBMT, is a 281 amino acid nuclear methyltransferase that may act on DNA. WBSCR22 is highly expressed in kidney, heart and skeletal muscle and has lower levels of expression in lung, spleen, liver and testis.

REFERENCES

1. Pober, B.R. and Dykens, E.M. 1996. Child Aldolesc. Psychiatr. Clin. North Am. 5: 929-943.
2. Morris, C.A., et al. 1988. Natural history of Williams syndrome: physical characteristics. J. Pediatr. 113: 318-326.
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. Tassabehji, M., et al. 1999. A transcription factor involved in skeletal muscle gene expression is deleted in patients with Williams syndrome. Eur. J. Hum. Genet. 7: 737-747.
6. Doll, A. and Grzeschik, K.H. 2001. Characterization of two novel genes, WBSCR20 and WBSCR22, deleted in Williams-Beuren syndrome. Cytogenet. Cell Genet. 95: 20-27.

CHROMOSOMAL LOCATION

Genetic locus: WBSCR22 (human) mapping to 7q11.23; Wbscr22 (mouse) mapping to 5 G2.

SOURCE

WBSCR22 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of WBSCR22 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-163519 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WBSCR22 (C-16) is recommended for detection of WBSCR22 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

WBSCR22 (C-16) is also recommended for detection of WBSCR22 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for WBSCR22 siRNA (h): sc-89457, WBSCR22 siRNA (m): sc-155248, WBSCR22 shRNA Plasmid (h): sc-89457-SH, WBSCR22 shRNA Plasmid (m): sc-155248-SH, WBSCR22 shRNA (h) Lentiviral Particles: sc-89457-V and WBSCR22 shRNA (m) Lentiviral Particles: sc-155248-V.

Molecular Weight of WBSCR22: 32 kDa.

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) 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.

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.

PROTOCOLS

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