SANTA CRUZ BIOTECHNOLOGY, INC.

WBSCR17 (N-13): sc-165881

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Williams-Beuren syndrome (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. WBSCR17 (Williams-Beuren syndrome chromosomal region 17 protein), also known as putative polypeptide N-acetylgalactosaminyltransferase-like protein 3, polypeptide GalNAc transferase-like protein 3, or GALNTL3, is a 598 amino acid single-pass type II membrane protein belonging to the glycosyltransferase 2 family and GalNAc-T subfamily. Containing one ricin B-type lectin domain, WBSCR17 localizes to Golgi apparatus membrane and is highly expressed in brain and heart. Utilizing manganese and calcium as cofactors, WBSCR17 may catalyze the initial reaction in O-linked oligosaccharide biosynthesis.

REFERENCES

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2. Morris, C.A., et al. 1988. Natural history of Williams syndrome: physical characteristics. J. Pediatr. 113: 318-326.
3. Dilts, C.V., et al. 1990. Hypothesis for development of a behavioral phenotype in Williams syndrome. Am. J. Med. Genet. Suppl. 6: 126-131.
4. Lashkari, A., et al. 1999. Williams-Beuren syndrome: an update and review for the primary physician. Clin. Pediatr. 38: 189-208.
5. Bellugi, U., et al. 1999. Bridging cognition, the brain and molecular genetics: evidence from Williams syndrome. Trends Neurosci. 22: 197-207.
6. Merla, G., et al. 2002. Identification of additional transcripts in the Williams-Beuren syndrome critical region. Hum. Genet. 110: 429-438.
7. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
8. 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.

CHROMOSOMAL LOCATION

Genetic locus: WBSCR17 (human) mapping to 7q11.22; Wbscr17 (mouse) mapping to 5 G2.

SOURCE

WBSCR17 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WBSCR17 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-165881 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WBSCR17 (N-13) is recommended for detection of WBSCR17 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.

WBSCR17 (N-13) is also recommended for detection of WBSCR17 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for WBSCR17 siRNA (h): sc-89800, WBSCR17 siRNA (m): sc-155246, WBSCR17 shRNA Plasmid (h): sc-89800-SH, WBSCR17 shRNA Plasmid (m): sc-155246-SH, WBSCR17 shRNA (h) Lentiviral Particles: sc-89800-V and WBSCR17 shRNA (m) Lentiviral Particles: sc-155246-V.

Molecular Weight of WBSCR17: 68 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.