SANTA CRUZ BIOTECHNOLOGY, INC.

GTSCR1 (C-18): sc-84831

BACKGROUND

GTSCR1 (Gilles de la Tourette syndrome chromosome region, candidate 1) is a 136 amino acid single-pass membrane protein. Gilles de la Tourette syndrome (GTS) is a potentially debilitating neuropsychiatric disorder defined by the presence of both vocal and motor tics. The GTSCR1 gene maps to human chromosome 18q22.1. Encoding over 300 genes, chromosome 18 contains about 76 million bases. Trisomy 18, or Edwards syndrome, is the second most common trisomy after Downs syndrome. Symptoms of Edwards syndrome include low birth weight, a variety of physical development defects, heart deformations and breathing difficulty. Translocation between chromosome 18 and 14 is the most common translocation in cancers, and occurs in follicular lymphomas. Niemann-Pick disease, hereditary hemorrhagic telangiectasia and erythropoietic protoporphyria are associated with chromosome 18. The TGFβ modulators, Smad2, Smad4 and Smad7 are encoded by chromosome 18.

REFERENCES

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2. Petek, E., et al. 2003. Characterisation of a 19-year-old "long-term survivor" with Edwards syndrome. Genet. Couns. 14: 239-244.
3. Raghavan, S.C., et al. 2004. A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. Nature 428: 88-93.
4. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. Am.J. Med. Genet. A 134A: 88-94.
5. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. Mol. Genet. Metab. 90: 402-407.
6. Broderick, P., et al. 2007. A genome-wide association study shows that common alleles of SMAD7 influence colorectal cancer risk. Nat. Genet. 39: 1315-1317.
7. Kamal, A.H. and Prakash, U.B. 2007. Hereditary hemorrhagic telangiectasia. Mayo Clin. Proc. 82: 1364.

CHROMOSOMAL LOCATION

Genetic locus: GTSCR1 (human) mapping to 18q22.1.

SOURCE

GTSCR1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GTSCR1 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-84831 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GTSCR1 (C-18) is recommended for detection of GTSCR1 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).

Suitable for use as control antibody for GTSCR1 siRNA (h): sc-75215, GTSCR1 shRNA Plasmid (h): sc-75215-SH and GTSCR1 shRNA (h) Lentiviral Particles: sc-75215-V.

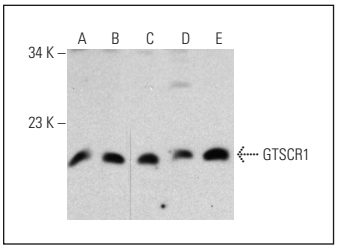
Molecular Weight of GTSCR1: 18 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, IMR-32 cell lysate: sc-2409 or Jurkat whole cell lysate: sc-2204.

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



GTSCR1 (C-18): sc-84831. Western blot analysis of GTSCR1 expression in SK-N-MC (**A**), IMR-32 (**B**), Jurkat (**C**), Caki-1 (**D**) and HeLa (**E**) 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.

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.