SANTA CRUZ BIOTECHNOLOGY, INC.

RCBTB2 (G-18): sc-84053

BACKGROUND

RCBTB2 (RCC1 and BTB domain-containing protein 2), also known as CHC1L and RLG, is a protein that contains two BTB (POZ) domains and six RCC1 repeats. RCBTB2 exists as 2 isoforms that are 527 and 551 amino acids long. The gene encoding RCBTB2 maps to human chromosome 13. Comprising nearly 4% of the human genome, chromosome 13 contains around 114 million base pairs and encodes over 400 genes. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

1. Dunham, A., Matthews, L.H., Burton, J., Ashurst, J.L., Howe, K.L., Ashcroft, K.J., Beare, D.M., Burford, D.C., Hunt, S.E., Griffiths-Jones, S., Jones, M.C., Keenan, S.J., Oliver, K, et al. 2004. The DNA sequence and analysis of human chromosome 13. Nature 428: 522-528.
2. O'Reilly, M.K., Zhang, G. and Imperiali, B. 2006. *In vitro* evidence for the dual function of Alg2 and Alg11: essential mannosyltransferases in N-linked glycoprotein biosynthesis. Biochemistry 45: 9593-9603.
3. Rohozinski, J., Lamb, D.J. and Bishop, C.E. 2006. UTP14c is a recently acquired retrogene associated with spermatogenesis and fertility in man. Biol. Reprod. 74: 644-651.
4. Bugge, M., Collins, A., Hertz, J.M., Eiberg, H., Lundsteen, C., Brandt, C.A., Bak, M., Hansen, C., Delozier, C.D., Lespinasse, J., Tranebjaerg, L., Hahnemann, J.M., Rasmussen, K., Bruun-Petersen, G., Duprez, L., Tommerup, N. and Petersen, M.B. 2007. Non-disjunction of chromosome 13. Hum. Mol. Genet. 16: 2004-2010.
5. Hall, H.E., Chan, E.R., Collins, A., Judis, L., Shirley, S., Surti, U., Hoffner, L., Cockwell, A.E., Jacobs, P.A. and Hassold, T.J. 2007. The origin of trisomy 13. Am. J. Med. Genet. A 143: 2242-2248.
6. Hassler, M., Singh, S., Yue, W.W., Luczynski, M., Lakbir, R., Sanchez-Sanchez, F., Bader, T., Pearl, L.H. and Mittnacht, S. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. Mol. Cell 28: 371-385.

CHROMOSOMAL LOCATION

Genetic locus: RCBTB2 (human) mapping to 13q14.2; Rcbtb2 (mouse) mapping to 14 D3.

SOURCE

RCBTB2 (G-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RCBTB2 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84053 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RCBTB2 (G-18) is recommended for detection of RCBTB2 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).

RCBTB2 (G-18) is also recommended for detection of RCBTB2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RCBTB2 siRNA (h): sc-105200, RCBTB2 siRNA (m): sc-152770, RCBTB2 shRNA Plasmid (h): sc-105200-SH, RCBTB2 shRNA Plasmid (m): sc-152770-SH, RCBTB2 shRNA (h) Lentiviral Particles: sc-105200-V and RCBTB2 shRNA (m) Lentiviral Particles: sc-152770-V.

Molecular Weight of RCBTB2 isoforms: 58/60 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.