

ZYG11BL (S-16): sc-244838

BACKGROUND

ZYG11BL (zyg-11 homolog B-like protein), also known as ZER1, Hzyg or ZYG, is a 766 amino acid protein that contains 5 ARM repeats and 3 LRR (leucine-rich) repeats. Belonging to the zyg-11 family, ZYG11BL is expressed in testis, spermatocytes, spermatids, prostate, skeletal muscle, ovary, small intestine, heart, brain and pancreas. ZYG11BL is a component of the E3 ubiquitin ligase complex, along with CUL-2 and Elongin BC, and likely acts as target recruitment subunit. The gene encoding ZYG11BL maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

1. Feral, C., Wu, Y.Q., Pawlak, A. and Guellaën, G. 2001. Meiotic human sperm cells express a leucine-rich homologue of *Caenorhabditis elegans* early embryogenesis gene, Zyg-11. *Mol. Hum. Reprod.* 7: 1115-1122.
2. Zhuang, H., Kosboth, M., Lee, P., Rice, A., Driscoll, D.J., Zori, R., Narain, S., Lyons, R., Satoh, M., Sobel, E. and Reeves, W.H. 2006. Lupus-like disease and high interferon levels corresponding to trisomy of the type I interferon cluster on chromosome 9p. *Arthritis Rheum.* 54: 1573-1579.
3. Vasudevan, S., Starostina, N.G. and Kipreos, E.T. 2007. The *Caenorhabditis elegans* cell-cycle regulator ZYG-11 defines a conserved family of CUL-2 complex components. *EMBO Rep.* 8: 279-286.
4. Burmeister, T., Schwartz, S., Taubald, A., Jost, E., Lipp, T., Schneller, F., Diedrich, H., Thomssen, H., Mey, U.J., Eucker, J., Rieder, H., Gökbuget, N., Hoelzer, D. and Thiel, E. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
5. Cottin, V., Dupuis-Girod, S., Lesca, G. and Cordier, J.F. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (redu-Osler disease). *Respiration* 74: 361-378.
6. Zeitz, M.J., Marella, N.V., Malyavantham, K.S., Goetze, S., Bode, J., Raska, I. and Berezney, R. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. *Chromosome Res.* 17: 305-319.
7. Gold-von Simson, G., Goldberg, J.D., Rolnitzky, L.M., Mull, J., Leyne, M., Voustianiouk, A., Slaugenhaupt, S.A. and Axelrod, F.B. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. *Pediatr. Res.* 65: 341-346.
8. Axelrod, F.B., Hilz, M.J., Berlin, D., Yau, P.L., Javier, D., Sweat, V., Bruehl, H. and Convit, A. 2010. Neuroimaging supports central pathology in familial dysautonomia. *J. Neurol.* 257: 198-206.

CHROMOSOMAL LOCATION

Genetic locus: ZER1 (human) mapping to 9q34.11; Zer1 (mouse) mapping to 2 B.

SOURCE

ZYG11BL (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZYG11BL 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-244838 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZYG11BL (S-16) is recommended for detection of ZYG11BL 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 ZYG11A or ZYG11B.

ZYG11BL (S-16) is also recommended for detection of ZYG11BL in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZYG11BL siRNA (h): sc-92690, ZYG11BL siRNA (m): sc-155854, ZYG11BL shRNA Plasmid (h): sc-92690-SH, ZYG11BL shRNA Plasmid (m): sc-155854-SH, ZYG11BL shRNA (h) Lentiviral Particles: sc-92690-V and ZYG11BL shRNA (m) Lentiviral Particles: sc-155854-V.

Molecular Weight of ZYG11BL: 88 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.