SANTA CRUZ BIOTECHNOLOGY, INC.

ZYG11BL (D-4): sc-515652

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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., et al. 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., et al. 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., et al. 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., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
5. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.

CHROMOSOMAL LOCATION

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

SOURCE

ZYG11BL (D-4) is a mouse monoclonal antibody raised against amino acids 488-766 mapping at the C-terminus of ZYG11BL of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZYG11BL (D-4) is available conjugated to agarose (sc-515652 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515652 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515652 PE), fluorescein (sc-515652 FITC), Alexa Fluor® 488 (sc-515652 AF488), Alexa Fluor® 546 (sc-515652 AF546), Alexa Fluor® 594 (sc-515652 AF594) or Alexa Fluor® 647 (sc-515652 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515652 AF680) or Alexa Fluor® 790 (sc-515652 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZYG11BL (D-4) is recommended for detection of ZYG11BL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

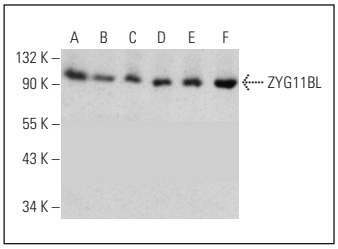
Molecular Weight of ZYG11BL: 88 kDa.

Positive Controls: L8 cell lysate: sc-3807, NCI-H460 whole cell lysate: sc-364235 or NCI-H1299 whole cell lysate: sc-364234.

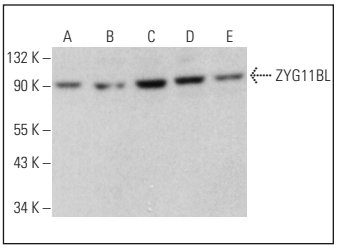
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZYG11BL (D-4): sc-515652. Western blot analysis of ZYG11BL expression in AT-3 (**A**), F9 (**B**), C6 (**C**), Neuro-2A (**D**), Sol8 (**E**) and L8 (**F**) whole cell lysates.



ZYG11BL (D-4): sc-515652. Western blot analysis of ZYG11BL expression in NCI-H1299 (**A**), NCI-H460 (**B**), A549 (**C**), RAW 264.7 (**D**) and PC-12 (**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 for detailed protocols and support products.