BXDC1 (h): 293T Lysate: sc-113764



The Power to Question

BACKGROUND

BXDC1 (Brix domain-containing protein 1) is a 306 amino acid protein encoded by the human gene BXDC1. BXDC1 is a nuclear protein that contains one Brix domain. Brix domain containing proteins represent a family of proteins involved in the biogenesis of large ribosomal subunits. The Brix domain is a region with homology to the yeast protein Pitx1 (ribosome biogenesis protein BRX1). Pitx1 is part of a complex that includes RPF1, RPF2 and SSF1 or SSF2. This complex is required for the biogenesis of the 60S ribosomal subunit.

REFERENCES

- Strezoska, Z., Pestov, D.G. and Lau, L.F. 2000. BOP1 is a mouse WD40 repeat nucleolar protein involved in 28S and 5.8S rRNA processing and 60S ribosome biogenesis. Mol. Cell. Biol. 20: 5516-5528.
- Sasaki, T., Toh-E, A. and Kikuchi, Y. 2000. Yeast KRR1p physically and functionally interacts with a novel essential KRl1p, and both proteins are required for 40S ribosome biogenesis in the nucleolus. Mol. Cell. Biol. 20: 7971-7979.
- 3. Kaser, A., Bogengruber, E., Hallegger, M., Doppler, E., Lepperdinger, G., Jantsch, M., Breitenbach, M. and Kreil, G. 2002. Brix from *Xenopus laevis* and Brx1p from yeast define a new family of proteins involved in the biogenesis of large ribosomal subunits. Biol. Chem. 382: 1637-1647.
- 4. Morita, D., Miyoshi, K., Matsui, Y., Toh-E, A., Shinkawa, H., Miyakawa, T. and Mizuta, K. 2002. Rpf2p, an evolutionarily conserved protein, interacts with Ribosomal Protein L11 and is essential for the processing of 27 SB Pre-rRNA to 25 S rRNA and the 60 S ribosomal subunit assembly in Saccharomyces cerevisiae. J. Biol. Chem. 277: 28780-28786.
- Mungall, A.J., Palmer, S.A., Sims, S.K., Edwards, C.A., Ashurst, J.L., Wilming, L., Jones, M.C., Horton, R., Hunt, S.E., Scott, C.E., Gilbert, J.G.R., Clamp, M.E., Bethel, G., Milne, S., Ainscough, R., Almeida, J.P., Ambrose, K.D., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
- McQueen, M.B., Devlin, B., Faraone, S.V., Nimgaonkar, V.L., Sklar, P., Smoller, J.W., Abou Jamra, R., Albus, M., Bacanu, S.A., Baron, M., Barrett, T.B., Berrettini, W., Blacker, D., Byerley, W., Cichon, S., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
- 7. Olsson, K.S., Ritter, B. and Hansson, N. 2007. The HLA-A1-B8 haplotype hitchhiking with the hemochromatosis mutation: does it affect the phenotype? Eur. J. Haematol. 79: 429-434.
- Safadi, S.S. and Shaw, G.S. 2007. A disease state mutation unfolds the Parkin ubiquitin-like domain. Biochemistry 46: 14162-14169.

CHROMOSOMAL LOCATION

Genetic locus: RPF2 (human) mapping to 6q21.

PRODUCT

BXDC1 (h): 293T Lysate represents a lysate of human BXDC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

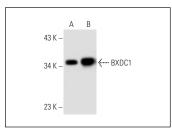
APPLICATIONS

BXDC1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BXDC1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

BXDC1 (2099C7a): sc-81060 is recommended as a positive control antibody for Western Blot analysis of enhanced human BXDC1 expression in BXDC1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



BXDC1 (2099C7a): sc-81060. Western blot analysis of BXDC1 expression in non-transfected: sc-117752 (A) and human BXDC1 transfected: sc-113764 (B) 293T whole cell lysates.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.

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