



BXDC2 (h3): 293T Lysate: sc-172530

BACKGROUND

BXDC2 (Brix domain-containing protein 2) is a 306 amino acid protein encoded by the human gene BXDC2. BXDC2 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 that is homologous to the yeast protein Pitx1 (ribosome biogenesis protein BRX1). Pitx1 is part of a complex that includes BXDC5, BXDC1 and PPAAN. This complex is required for the biogenesis of the 60S ribosomal subunit. BXDC2 exhibits the same functions as Pitx1.

REFERENCES

1. 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.
2. Sasaki, T., Toh-E, A. and Kikuchi, Y. 2000. Yeast Krr1p physically and functionally interacts with a novel essential Kri1p, 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 60S ribosomal subunit assembly in *Saccharomyces cerevisiae*. *J. Biol. Chem.* 277: 28780-28786.
5. 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., Andrews, T.D., Ashwell, R.I., Babbage, A.K., Bagguley, C.L., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
6. 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., Coryell, W., Craddock, N., Daly, M.J., Depaulo, J.R., Edenberg, H.J., Foroud, T., Gill, M., 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.
8. Safadi, S.S. and Shaw, G.S. 2007. A disease state mutation unfolds the Parkin ubiquitin-like domain. *Biochemistry* 46: 14162-14169.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: BRX1 (human) mapping to 5p13.2.

PRODUCT

BXDC2 (h3): 293T Lysate represents a lysate of human BXDC2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

BXDC2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive BXDC2 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-transfected 293T cells.

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.