

# BXDC1 (Q-12): sc-131448

## 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

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3. Kaser, A., et al. 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., et al. 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.
5. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
6. McQueen, 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., et al. 2007. The HLA-A1-B8 haplotype hitchhiking with the hemochromatosis mutation: does it affect the phenotype? *Eur. J. Haematol.* 79: 429-434.
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## CHROMOSOMAL LOCATION

Genetic locus: BXDC1 (human) mapping to 6q21; Bxdc1 (mouse) mapping to 10 B1.

## SOURCE

BXDC1 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BXDC1 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.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## 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-131448 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BXDC1 (Q-12) is recommended for detection of BXDC1 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 family members BXDC2 or BXDC5.

BXDC1 (Q-12) is also recommended for detection of BXDC1 in additional species, including bovine and avian.

Suitable for use as control antibody for BXDC1 siRNA (h): sc-95623, BXDC1 shRNA Plasmid (h): sc-95623-SH and BXDC1 shRNA (h) Lentiviral Particles: sc-95623-V.

Molecular Weight of BXDC1: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.