

# BICC1 (P-14): sc-162569

## BACKGROUND

BICC1, also known as protein bicaudal C homolog 1, is a 974 amino acid protein that belongs to the BICC family. BICC1 is considered a putative RNA-binding protein and may be involved in regulating gene expression during embryonic development by modulating protein translation. Existing as two alternatively spliced isoforms, BICC1 contains two KH domains as well as one SAM (sterile  $\alpha$  motif) domain. Both BICC1 isoforms are widely expressed in normal tissues and are found in all brain regions including cerebral cortex, hippocampus and midbrain, although BICC1 isoform 1 is more highly expressed than isoform 2, particularly in nerve tissue. BICC1 can uncouple dishevelled-2 (Dvl-2) signaling from the canonical Wnt pathway in a SAM domain dependent manner, suggesting that the different BICC1 isoforms may play varying biological roles. Genetic variants in BICC1 may be involved in recurrent unipolar major depression. The BICC1 gene maps to chromosome 10q21.1.

## REFERENCES

1. Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. *Cytogenet. Cell Genet.* 90: 1-12.
2. Nonneman, D., et al. 2004. Comparative mapping of human chromosome 10 to pig chromosomes 10 and 14. *Anim. Genet.* 35: 338-343.
3. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
4. Wimmers, K., et al. 2007. Associations of functional candidate genes derived from gene-expression profiles of prenatal porcine muscle tissue with meat quality and muscle deposition. *Anim. Genet.* 38: 474-484.
5. Chan, I.H., et al. 2009. Thyroid hormone receptor mutants implicated in human hepatocellular carcinoma display an altered target gene repertoire. *Oncogene* 28: 4162-4174.
6. Lewis, C.M., et al. 2010. Genome-wide association study of major recurrent depression in the U.K. population. *Am. J. Psychiatry* 167: 949-957.
7. Lohoff, F.W. 2010. Overview of the genetics of major depressive disorder. *Curr. Psychiatry Rep.* 12: 539-546.
8. SWISS-PROT/TrEMBL (Q9H694). World Wide Web URL: <http://www.uniprot.org/uniprot/Q9H694>

## CHROMOSOMAL LOCATION

Genetic locus: BICC1 (human) mapping to 10q21.1; Bicc1 (mouse) mapping to 10 B5.3.

## SOURCE

BICC1 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BICC1 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.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162569 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BICC1 (P-14) is recommended for detection of BICC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

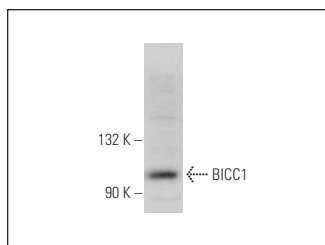
Suitable for use as control antibody for BICC1 siRNA (h): sc-90456, BICC1 siRNA (m): sc-141699, BICC1 shRNA Plasmid (h): sc-90456-SH, BICC1 shRNA Plasmid (m): sc-141699-SH, BICC1 shRNA (h) Lentiviral Particles: sc-90456-V and BICC1 shRNA (m) Lentiviral Particles: sc-141699-V.

Molecular Weight of BICC1: 105 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



BICC1 (P-14): sc-162569. Western blot analysis of BICC1 expression in U-251-MG whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

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