

BICC1 (A-12): sc-514846

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. and Rohrer, G.A. 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. and Privalsky, M.L. 2009. Thyroid hormone receptor mutants implicated in human hepatocellular carcinoma display an altered target gene repertoire. *Oncogene* 28: 4162-4174.

CHROMOSOMAL LOCATION

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

SOURCE

BICC1 (A-12) is a mouse monoclonal antibody raised against amino acids 243-480 mapping within an internal region of BICC1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BICC1 (A-12) is available conjugated to agarose (sc-514846 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514846 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514846 PE), fluorescein (sc-514846 FITC), Alexa Fluor® 488 (sc-514846 AF488), Alexa Fluor® 546 (sc-514846 AF546), Alexa Fluor® 594 (sc-514846 AF594) or Alexa Fluor® 647 (sc-514846 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514846 AF680) or Alexa Fluor® 790 (sc-514846 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

BICC1 (A-12) is recommended for detection of BICC1 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 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.

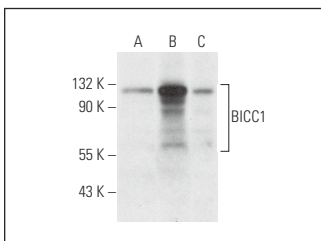
Molecular Weight of BICC1: 105 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, A549 cell lysate: sc-2413 or HeLa whole cell lysate: sc-2200.

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



BICC1 (A-12): sc-514846. Western blot analysis of BICC1 expression in U-251-MG (A), A549 (B) and HeLa (C) 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.

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