SANTA CRUZ BIOTECHNOLOGY, INC.

BCAS2 (H-181): sc-292534



BACKGROUND

BCAS2 (breast carcinoma amplified sequence 2), also designated DAM1 (DNA amplified in mammary carcinoma 1 protein) or spliceosome-associated SPF 27, is a ubiquitously expressed nuclear protein that was originally identified as being overexpressed in various breast cancer cell lines. BCAS2 is now known to be a component of the spliceosome, participating in the removal of introns from mRNA precursors. BCAS2 specifically interacts (in a ligand-independent manner) with TR β (thyroid hormone receptor β), ER α (estrogen receptor α), ER β , PR (progesterone receptor), and PPAR γ (peroxisome proliferator-activated receptor γ). BCAS2 functions as an ER coactivator and is capable of enhancing ER-mediated transcription. This suggests that BCAS2 is involved in the development of breast cancer.

REFERENCES

- 1. Nagasaki, K., et al. 1999. Identification of a novel gene, DAM1, amplified at chromosome 1p13.3-21 region in human breast cancer cell lines. Cancer Lett. 140: 219-226.
- Maass, N., et al. 2002. Amplification of the BCAS2 gene at chromosome 1p13.3-21 in human primary breast cancer. Cancer Lett. 185: 219-223.

CHROMOSOMAL LOCATION

Genetic locus: BCAS2 (human) mapping to 1p13.2; Bcas2 (mouse) mapping to 3 F2.2.

SOURCE

BCAS2 (H-181) is a rabbit polyclonal antibody raised against amino acids 45-225 mapping at the C-terminus of BCAS2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BCAS2 (H-181) is recommended for detection of BCAS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

BCAS2 (H-181) is also recommended for detection of BCAS2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BCAS2 siRNA (h): sc-88190, BCAS2 siRNA (m): sc-105116, BCAS2 shRNA Plasmid (h): sc-88190-SH, BCAS2 shRNA Plasmid (m): sc-105116-SH, BCAS2 shRNA (h) Lentiviral Particles: sc-88190-V and BCAS2 shRNA (m) Lentiviral Particles: sc-105116-V.

Molecular Weight of BCAS2: 26 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HEK293 whole cell lysate: sc-45136 or HEL 92.1.7 cell lysate: sc-2270.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





BCAS2 (H-181): sc-292534. Western blot analysis of BCAS2 expression in K-562 (**A**), U-937 (**B**), MCF7 (**C**), HeLa (**D**) and SH-SY5Y (**E**) whole cell lysates.

BCAS2 (H-181): sc-292534. Western blot analysis of BCAS2 expression in HEK293 (A) and HEL 92.1.7 (B) 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try BCAS2 (F-5): sc-376554 or BCAS2 (G-8):

sc-365346, our highly recommended monoclonal alternatives to BCAS2 (H-181).