# SANTA CRUZ BIOTECHNOLOGY, INC.

# BS69 (H-265): sc-292571



# BACKGROUND

The adenovirus E1A gene products are nuclear phosphoproteins with the ability to transactivate other adenovirus genes. BS69 specifically interacts with adenovirus 5 E1A and inhibits transactivation by the 289R E1A protein. BS69 interacts with the co-repressor N-CoR through an essential MYND domain in the carboxy terminus of N-CoR. BS69 also inhibits the transcriptional activity of c-Myb. During oncogenesis, this BS69/Myb regulatory circuit maybe be a target for disruption. Another ubiquitously expressed member of the Myb gene family, b-Myb, also interacts with BS69 and N-CoR to function as a transcriptional repressor. BRAM1, a splice variant of BS69, binds specifically to bone morphogenetic protein type IA receptor (BMPR-IA). BRAM1 localizes to the cytoplasm of mammalian cells, while BS69 localizes to the cell nucleus. Unlike BS69, BRAM1 is unable to repress transcription.

## REFERENCES

- Hateboer, G., Gennissen, A., Ramos, Y.F., Kerkhoven, R.M., Sonntag-Buck, V., Stunnenberg, H.G. and Bernards, R. 1995. BS69, a novel adenovirus E1A-associated protein that inhibits E1A transactivation. EMBO J. 14: 3159-3169.
- Kurozumi, K., Nishita, M., Yamaguchi, K., Fujita, T., Ueno, N. and Shibuya, H. 1998. BRAM1, a BMP receptor-associated molecule involved in BMP signalling. Genes Cells 3:257-64.
- Masselink, H. and Bernards, R. 2000. The adenovirus E1A binding protein BS69 is a corepressor of transcription through recruitment of N-CoR. Oncogene 19: 1538-1546.
- Masselink, H., Vastenhouw, N. and Bernards, R. 2001. B-myb rescues rasinduced premature senescence, which requires its transactivation domain. Cancer Lett. 171: 87-101.
- Ladendorff, N.E., Wu, S. and Lipsick, J.S. 2001. BS69, an adenovirus E1Aassociated protein, inhibits the transcriptional activity of c-Myb. Oncogene 20: 125-132.

#### CHROMOSOMAL LOCATION

Genetic locus: ZMYND11 (human) mapping to 10p15.3; Zmynd11 (mouse) mapping to 13 A1.

# SOURCE

BS69 (H-265) is a rabbit polyclonal antibody raised against amino acids 255-519 mapping near the C-terminus of BS69 of human origin.

#### PRODUCT

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

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

BS69 (H-265) is recommended for detection of BS69 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).

BS69 (H-265) is also recommended for detection of BS69 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BS69 siRNA (h): sc-106842, BS69 siRNA (m): sc-141760, BS69 shRNA Plasmid (h): sc-106842-SH, BS69 shRNA Plasmid (m): sc-141760-SH, BS69 shRNA (h) Lentiviral Particles: sc-106842-V and BS69 shRNA (m) Lentiviral Particles: sc-141760-V.

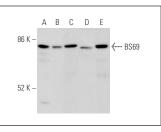
Molecular Weight of BS69: 66 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or Hep G2 nuclear extract: sc-364819.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



BS69 (H-265): sc-292571. Western blot analysis of BS69 expression in HeLa (A), RT-4 (B) and NIH/3T3 (C) whole cell lysates, mouse liver tissue extract (D) and Hep G2 nuclear extract (E).

# **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.