SANTA CRUZ BIOTECHNOLOGY, INC.

BS69 (E-20): sc-15455

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. 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.
2. 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: 257-264.
3. 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.
4. Ladendorff, N.E., Wu, S. and Lipsick, J.S. 2001. BS69, an adenovirus E1A-associated protein, inhibits the transcriptional activity of c-Myb. Oncogene 20: 125-132.
5. Masselink, H., Vastenhouw, N. and Bernards, R. 2001. B-Myb rescues Ras-induced premature senescence, which requires its transactivation domain. Cancer Lett. 171: 87-101.

CHROMOSOMAL LOCATION

Genetic locus: ZMYND11 (human) mapping to 10p15.3.

SOURCE

BS69 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of BS69 of human origin.

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-15455 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15455 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

BS69 (E-20) is recommended for detection of BS69 of human origin by Western Blotting (starting dilution 1:200, 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).

BS69 (E-20) is also recommended for detection of BS69 in additional species, including equine, canine, porcine and avian.

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

BS69 (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BS69: 66 kDa.

Positive Controls: HCT-116 whole cell lysate: sc-364175.

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.

SELECT PRODUCT CITATIONS

1. Hao, J., Shen, R., Li, Y., Zhang, Y. and Yin, Y. 2014. Cancer-testis antigen HCA587/MAGE-C2 interacts with BS69 and promotes its degradation in the ubiquitin-proteasome pathway. Biochem. Biophys. Res. Commun. 449: 386-391.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.