SANTA CRUZ BIOTECHNOLOGY, INC.

BCAM (m): 293T Lysate: sc-126494

BACKGROUND

Cell adhesion molecules (CAMs) influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. Regulation of neuronal synaptic adhesion by CAMs has proven important for learning and memory. Proper embryonic morphogenic development is also heavily dependent on the regulation of cell adhesion molecules. Mutation of CAM genes has been linked to several forms of cancer, affecting tumor growth and metastasis. Lutheran blood group glycoprotein, also designated BCAM cell surface glycoprotein or auberger B antigen, plays a role in intracellular signaling. It is a widely expressed protein but the highest level of expression is in pancreas tissue.

REFERENCES

1. Campbell, I., Foulkes, W., Senger, G., Trowsdale, J., Garin-Chesa, P. and Rettig, W. 1994. Molecular cloning of the BCAM cell surface glycoprotein of epithelial cancers: a novel member of the immunoglobulin superfamily. Cancer Res. 54: 5761-5765.
2. Parsons, S.F., Mallinson, G., Holmes, C.H., Houlihan, J.M., Simpson, K.L., Mawby, W., Spurr, N., Warne, D., Barclay, A. and Anstee, D. 1995. The Lutheran blood group glycoprotein, another member of the immunoglobulin superfamily, is widely expressed in human tissues and is developmentally regulated in human liver. Proc. Natl. Acad. Sci. USA 92: 5496-5500.
3. Zhang, H., Li, X.J., Martin, D.B. and Aebersold, R. 2003. Identification and quantification of N-linked glycoproteins using hydrazide chemistry, stable isotope labeling and mass spectrometry. Nat. Biotechnol. 21: 660-666.
4. Hines, P.C., Zen, Q., Burney, S.N., Shea, D.A., Ataga, K.I., Orringer, E.P., Telen, M.J. and Parise, L.V. 2003. Novel epinephrine and cyclic AMP-mediated activation of BCAM/LU-dependent sickle (SS) RBC adhesion. Blood 101: 3281-3287.
5. Murphy, M.M., Zayed, M.A., Evans, A., Parker, C.E., Ataga, K.I., Telen, M.J. and Parise, L.V. 2005. Role of Rap1 in promoting sickle red blood cell adhesion to laminin via BCAM/LU. Blood 105: 3322-3329.
6. SWISS-PROT/TrEMBL (P50895). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

Genetic locus: Lu (mouse) mapping to 7 A3.

PRODUCT

BCAM (m): 293T Lysate represents a lysate of mouse BCAM transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

BCAM (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BCAM antibodies. Recommended use: 10-20 µl per lane.

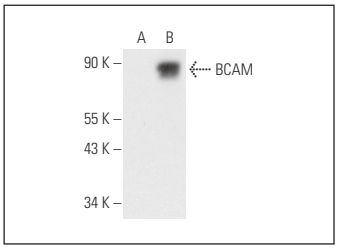
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BCAM (A-7): sc-514556 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse BCAM expression in BCAM transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

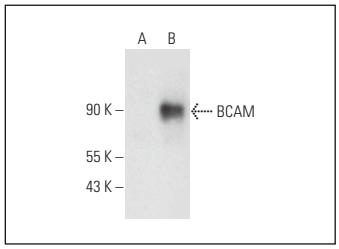
RECOMMENDED SUPPORT REAGENTS

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.

DATA



BCAM (A-7): sc-514556. Western blot analysis of BCAM expression in non-transfected: sc-117752 (**A**) and mouse BCAM transfected: sc-126494 (**B**) 293T whole cell lysates.



BCAM (A-4): sc-514758. Western blot analysis of BCAM expression in non-transfected: sc-117752 (**A**) and mouse BCAM transfected: sc-126494 (**B**) 293T whole cell lysates.

RESEARCH USE

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