

# BCAM (N-20): sc-46799

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

BCAM (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of BCAM of mouse 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-46799 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

BCAM (N-20) is recommended for detection of mature LU and BCAM precursor of mouse and rat 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).

Suitable for use as control antibody for BCAM siRNA (m): sc-60264, BCAM shRNA Plasmid (m): sc-60264-SH and BCAM shRNA (m) Lentiviral Particles: sc-60264-V.

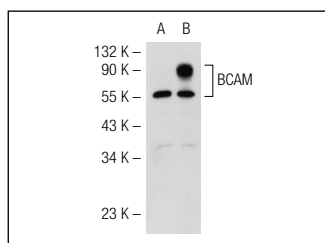
Molecular Weight of BCAM major/minor isoforms: 85/78 kDa.

Positive Controls: BCAM (m): 293T Lysate: sc-126494.

## 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.

## DATA



BCAM (N-20): sc-46799. 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.

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Try **BCAM (A-4): sc-514758** or **BCAM (A-7): sc-514556**, our highly recommended monoclonal alternatives to BCAM (N-20).