

BCAM (C-16): sc-46795

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, effecting tumor growth and metastasis. Lutheran blood group glycoprotein, also designated B-CAM cell surface glycoprotein or aubergier 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., et al. 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., et al. 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., et al. 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., et al. 2003. Novel epinephrine and cyclic AMP-mediated activation of BCAM/LU-dependent sickle (SS) RBC adhesion. *Blood* 101: 3281-3287.

CHROMOSOMAL LOCATION

Genetic locus: BCAM (human) mapping to 19q13.32; Bcam (mouse) mapping to 7 A3.

SOURCE

BCAM (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BCAM 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-46795 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.

PROTOCOLS

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

APPLICATIONS

BCAM (C-16) is recommended for detection of mature LU and BCAM precursor of mouse, rat and 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).

BCAM (C-16) is also recommended for detection of mature LU and BCAM precursor in additional species, including equine and porcine.

Suitable for use as control antibody for BCAM siRNA (h): sc-60263, BCAM siRNA (m): sc-60264, BCAM shRNA Plasmid (h): sc-60263-SH, BCAM shRNA Plasmid (m): sc-60264-SH, BCAM shRNA (h) Lentiviral Particles: sc-60263-V and BCAM shRNA (m) Lentiviral Particles: sc-60264-V.

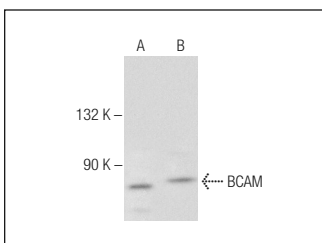
Molecular Weight of BCAM major/minor isoforms: 85/78 kDa.

Positive Controls: U-698-M whole cell lysate: sc-364799 or A-431 whole cell lysate: sc-2201.

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 (C-16): sc-46795. Western blot analysis of BCAM expression in U-698-M (A) and A-431 (B) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
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Try **BCAM (D-6): sc-365191** or **BCAM (A-4): sc-514758**, our highly recommended monoclonal alternatives to BCAM (C-16).