Human BCAM
Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 87207

Catalog Number: FAB1481G

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BCAM in ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) ALCAM, rhEpCAM, recombinant mouse (rm) MAdCAM-1, rhMCAM, rhNCAM-L1, rmOCAM, or rmTROP-2 is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 87207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human BCAM Glu32-Ala547 Accession # CAA58449
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	Huh-7 human hepatoma cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Basal-Cell Adhesion Molecule (BCAM) and Lutheran blood group glycoprotein (LU) are two alternatively spliced variants of a single immunoglobulin superfamily (IgSF) protein that differ in the length of their cytoplasmic tails. BCAM cDNA encodes a 628 amino acid (aa) residues precursor protein with a putative 31 aa signal peptide, a 597 aa extracellular domain containing three C2 type and two V-type Ig-like domains, a 21 aa transmembrane domain, and a 19 aa cytoplasmic domain. Compared to the 40 aa cytoplasmic domain present in LU, the BCAM cytoplasmic tail lacks the putative Src homology 3 (SH3) binding site that may be involved in mediating intracellular signaling. BCAM/LU has wide tissue distribution and is expressed on erythrocytes, the endothelium of blood vessels and on the basal layer of cells in the epithelia. The expression of BCAM/LU in normal tissues is higher in fetal versus adult tissues. BCAM/LU expression is also upregulated in sickle cell disease red blood cells, in activated keratinocytes and following malignant transformation in some cell types *in vivo* and *in vitro*. BCAM/LU has been shown to be an adhesion molecule that binds laminin, a basement membrane protein involved in cell differentiation, adhesion, migration and proliferation.

References:

1. Campbell, I.G. *et al.* (1994) Cancer Research **54**:5761.
2. Parsons, S.F. *et al.* (1995) Proc. Natl., Acad. Sci. USA, **92**:5496.
3. Udani, M. *et al.* (1998) **101**:2550.
4. Schon, M. *et al.* (2000) J. Invest. Dermatol, **115**:1047.

PRODUCT SPECIFIC NOTICES

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449