

**DESCRIPTION**

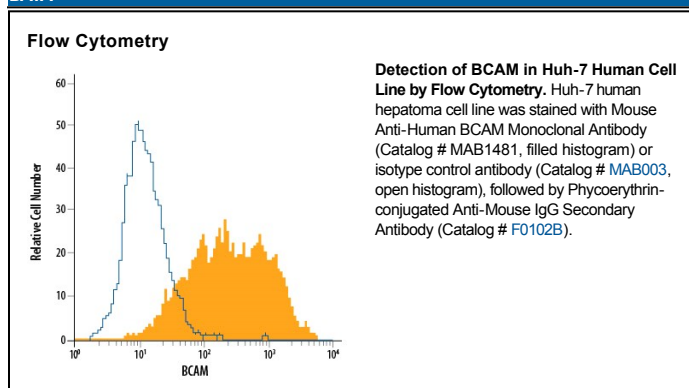
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BCAM in ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) ALCAM, rhEpCAM, recombinant mouse (rm) MAdCAM-1, rhMCAM, rhNCAM-L1, rmOCAM, or rmTROP-2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 87207
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human BCAM Glu32-Ala547 Accession # CAA58449
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Human BCAM Fc Chimera (Catalog # 148-BC)
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Human BCAM Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Human BCAM Antibody (Catalog # MAB1481)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human BCAM Biotinylated Antibody (Catalog # BAF148)
<b>Standard</b>		Recombinant Human BCAM Fc Chimera (Catalog # 148-BC)
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.