**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) MA4CAM-1, rhMCAM, rhNCAM-L1, rmOCAM, or rmTROP-2 is observed.

**Source**  
Monoclonal Mouse IgG2A 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

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.  
*Small pack size (-SP) is supplied either lyophilized or 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.

<table>
<thead>
<tr>
<th>Application</th>
<th><strong>Recommended Concentration</strong></th>
<th><strong>Sample</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td>Recombinant Human BCAM Fc Chimera (Catalog # 148-BC)</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>2.5 μg/10⁶ cells</td>
<td>See Below</td>
</tr>
<tr>
<td>Human BCAM Sandwich Immunoassay</td>
<td>2-8 μg/mL</td>
<td>Human BCAM Antibody (Catalog # MAB1481)</td>
</tr>
<tr>
<td>ELISA Capture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELISA Detection</td>
<td>0.1-0.4 μg/mL</td>
<td>Human BCAM Biotinylated Antibody (Catalog # BAF148)</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td></td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
</tr>
</tbody>
</table>

**DATA**

**Flow Cytometry**

Detection of BCAM in Huh-7 Human Cell Line by Flow Cytometry. Huh-7 human hepatoma cell line was stained with Mouse Anti-Human BCAM Monoclonal Antibody (Catalog # MAB1481, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

**PREPARATION AND STORAGE**

**Reconstitution**  
Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping**  
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

**Stability & Storage**  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.
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: