Technical Data Sheet

BV786 Mouse Anti-Human CD166

Product Information

Material Number: 564939
Alternate Name: ALCAM; Activated leucocyte cell adhesion molecule; MEMD
Size: 50 Tests
Vol. per Test: 5 µl
Clone: 3A6
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: VI A109
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 3A6 monoclonal antibody specifically binds to the activated leukocyte cell adhesion molecule (ALCAM), a 100-105 kDa transmembrane glycoprotein, also known as the CD6 ligand, CD166. It is composed of an immunoglobulin-like extracellular domain, a transmembrane region and a short cytoplasmic tail. ALCAM belongs to the Ig superfamily of proteins and is expressed on neurons, activated T cells, activated monocytes, epithelial cells and fibroblasts. CD166 plays an important role in mediating adhesion interactions between thymic epithelial cells and CD6+ cells during intrathymic T-cell development.

The antibody was conjugated to BD Horizon BV786 which is part of the BD Horizon Brilliant™ Violet family of dyes. This dye is a tandem fluorochrome of BD Horizon BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 786-nm. BD Horizon BV786 can be excited by the violet laser and detected in a filter used to detect Cy™7-like dyes (eg, 780/60-nm filter).

Flow cytometric analysis of CD166 expression on human peripheral blood monocytes. Whole blood was stained with FITC Mouse Anti-Human CD14 antibody (Cat. No. 555397/557153/561712) and either BD Horizon™ BV786 Mouse IgG1, κ Isotype Control (Cat. No. 563330; dashed line histogram) or BD Horizon BV786 Mouse Anti-Human CD166 antibody (Cat. No. 564939; solid line histogram). Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). The fluorescence histograms were derived from CD14+ gated events with the forward and side light-scatter characteristics of intact monocytes. Flow cytometric analysis was performed using a BD LSRFortessa™ Cell Analyzer System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ BV786 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV786 were removed.

Application Notes

Application

Flow cytometry Routinely Tested

BD Biosciences

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Recommended Assay Procedure:
For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794/566349) or the BD Horizon Brilliant Stain Buffer Plus (Cat. No. 566385).

Suggested Companion Products

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<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>566385</td>
<td>Brilliant Stain Buffer Plus</td>
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Product Notices
1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Cy is a trademark of GE Healthcare.
7. BD Horizon Brilliant Violet 786 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; 8,354,239.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.

References