**BV510 Mouse Anti-Human CD27**

**Product Information**
- **Material Number:** 563092
- **Alternate Name:** TNFRSF7; Tumor necrosis factor receptor superfamily, member 7; Tp55; S152
- **Size:** 100 tests
- **Vol. per Test:** 5 µl
- **Clone:** L128
- **Immunogen:** Human Activated Peripheral Blood Cells
- **Isotype:** Mouse (BALB/c) IgG1
- **Reactivity:** QC Testing: Human
- **Workshop:** VI T6T037
- **Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**
The L128 monoclonal antibody specifically binds to human CD27. CD27 is a 55-kDa disulfide-linked dimer that is a member of the nerve growth factor (NGF) super family. This family also includes CD40, rat OX40, tumor necrosis factor (TNF) receptors and CD95 (Fas). With its ligand CD70, CD27 acts in a co-stimulatory fashion on T lymphocytes. Present on most peripheral blood T lymphocytes and medullary thymocytes, the CD27 antigen is upregulated upon activation with the release of a soluble form, 28 to 32 kDa. It is also detected on a subpopulation of approximately 33% of circulating B lymphocytes. Following exposure to antigens, CD45RA+ T lymphocytes respond by upregulating the CD27 antigen. After maximal stimulation, the CD27 antigen cannot be re-expressed on long-term cultures or on CD45RA-CD27+ T lymphocytes. The CD4+CD27+ population is contained within the memory CD45RO+ subset that proliferates after exposure to allergens. Two subpopulations of B lymphocytes bearing the CD27 antigen secrete IgM (δ+) and IgG (δ-).

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.

**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™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

**Application Notes**

**Application**
- Flow cytometry: Routinely Tested

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**Flow cytometric analysis of CD27 expression on human peripheral blood lymphocytes.** Human whole blood was stained with the BD Horizon™ BV510 Mouse Anti-Human CD27 antibody (Cat. No. 563090/563092; solid line histogram) or with BD Horizon™ BV510 Mouse IgG1, κ Isotype Control (Cat. No. 562946; dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometry System.
Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
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<tr>
<td>562946</td>
<td>BV510 Mouse IgG1, k Isotype Control</td>
<td>50 µg</td>
<td>X40</td>
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<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 ml</td>
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<tr>
<td>563090</td>
<td>BV510 Mouse Anti-Human CD27</td>
<td>25 tests</td>
<td>L128</td>
</tr>
</tbody>
</table>

Product Notices
1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Brilliant Violet™ 510 is a trademark of Sirigen.

References