Technical Data Sheet

BV421 Mouse Anti-Human OX40 Ligand (CD252)

Product Information

Material Number: 563766
Alternate Name: CD252; OX40 Ligand; CD134 Ligand; CD134L; TNFSF4; GP34; TXGP1
Size: 50 Tests
Vol. per Test: 5 µl
Clone: ik-1
Immunogen: Human OX40 Ligand Transfected Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The ik-1 monoclonal antibody specifically binds to OX40 Ligand (OX40L) which is also known as CD252 and CD134 Ligand. OX40L is encoded by TNFSF4 (Tumor necrosis factor (ligand) superfamily, member 4). OX40L a 34 kDa type II transmembrane glycoprotein that is expressed by dendritic cells, B cells, human umbilical vein endothelial cells (HUVEC) and other types of vascular endothelial cells. OX40L serves as a costimulatory ligand by binding to and signaling through OX40 (CD134) which is expressed on activated T cells. It also mediates adhesion of activated T cells or OX40-positive transformed cells to vascular endothelial cells. Monocyte-derived dendritic cells (MoDC) express OX40 Ligand after stimulation through CD40. Ligation of OX40 Ligand expressed by activated MoDC can significantly increase their cytokine production.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.

Flow cytometric analysis of OX40 Ligand expression on human peripheral blood lymphocytes. Human peripheral blood mononuclear cells were preincubated with recombinant OX40 Ligand and stimulated with phytohemagglutinin (PHA; Sigma L-1668) for 3 days. The cells were then stained with either BD Horizon™ BV421 Mouse IgG1, k Isotype Control (Cat. No. 562438; dashed line histogram) or BD Horizon™ BV421 Mouse Anti-Human OX40 Ligand (CD252) (Cat. No. 563766; solid line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer 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™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

Application Notes

Application

Flow cytometry Routinely Tested

BD Biosciences

bdbiosciences.com/contact

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to rejual or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

© 2016 BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.
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).

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>562438</td>
<td>BV421 Mouse IgG1, k Isotype Control</td>
<td>50 µg</td>
<td>X40</td>
</tr>
<tr>
<td>563794</td>
<td>Brilliant Stain Buffer</td>
<td>100 Tests</td>
<td>(none)</td>
</tr>
<tr>
<td>566349</td>
<td>Brilliant Stain Buffer</td>
<td>1000 Tests</td>
<td>(none)</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 × 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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. 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.
8. BD Horizon Brilliant Violet 421 is covered by one or more of the following US patents: 8,158,444; 8,362,193; 8,575,303; 8,354,239.

References