Technical Data Sheet

BB515 Mouse Anti-Human Siglec-1 (CD169)

Product Information
Material Number: 565353
Alternate Name: Sialoadhesin; SN; SIGLEC1; Siglec-1; Sialic acid-binding Ig-like lectin 1
Size: 100 Tests
Vol. per Test: 5 µl
Clone: 7-239
Immunogen: Human Rhinovirus-infected Dendritic Cells
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing <0.09% sodium azide.

Description
The 7-239 monoclonal antibody specifically binds to Sialic acid-binding Ig-like lectin 1 (Siglec-1), which is also known as Sialoadhesin (SN), or CD169. Siglec-1 is a type I transmembrane glycoprotein that belongs to the Siglec family within the Ig superfamily. This adhesion molecule especially binds to glycolipids and glycoproteins with terminal α-2 sialyl residues. Siglec-1 is expressed by macrophages and dendritic cells and serves as a cellular interaction molecule. Its expression can be upregulated by cells in response to type II collagen, or to cytokines including interferons, and tumor necrosis factor. Siglec-1 plays roles in endocytosis, hematopoiesis, and leukocyte migration. It mediates macrophage binding to various cell types including developing and mature leucocytes. Siglec-1 that is expressed by dendritic cells can also bind HIV-1 and may mediate viral transfer to bystander CD4+ T cells. Several Siglec-1 counter-receptors have been described including CD43, CD206, and CD227 which are expressed by T cells, macrophages, or breast cancer cells, respectively. The 7-239 antibody reportedly blocks Siglec-1 functions in some cellular assay systems.

The antibody was conjugated to BD Horizon BB515 which was developed exclusively by BD Biosciences. With an excitation max of 490 nm and an emission max of 515 nm, BD Horizon BB515 can be excited by the 488 nm laser and detected in a standard FITC set (eg, 530/30-nm filter). This dye provides a much brighter alternative to FITC with less spillover into the PE detector.
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™ BB515 under optimum conditions and unconjugated antibody was removed.

Application Notes

Application

| Flow cytometry | Routinely Tested |

Recommended Assay Procedure:
For optimal results, it is recommended to perform 2 washes after staining with antibodies. Cells may be prepared, stained with antibodies and washed twice with wash buffer per established protocols for immunofluorescent staining, prior to acquisition on a flow cytometer. Performing fewer than the recommended wash steps may lead to increased spread of the negative population.

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>563794</td>
<td>Brilliant Stain Buffer</td>
<td>5 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>564416</td>
<td>BB515 Mouse IgG1, κ Isotype Control</td>
<td>100 μg</td>
<td>X40</td>
</tr>
<tr>
<td>564219</td>
<td>Human BD Fe Block™</td>
<td>50 μg</td>
<td>Fc1.3070</td>
</tr>
<tr>
<td>564220</td>
<td>Human BD Fe Block™</td>
<td>0.25 mg</td>
<td>Fc.1.3070</td>
</tr>
<tr>
<td>555399</td>
<td>APC Mouse Anti-Human CD14</td>
<td>100 Tests</td>
<td>M5E2</td>
</tr>
<tr>
<td>561708</td>
<td>APC Mouse Anti-Human CD14</td>
<td>25 Tests</td>
<td>M5E2</td>
</tr>
<tr>
<td>561383</td>
<td>APC Mouse Anti-Human CD14</td>
<td>50 Tests</td>
<td>M5E2</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. 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.
4. The manufacture, use, sale, offer for sale, or import of this product is subject to one or more patents or pending applications. This product, and only in the amount purchased by buyer, may be used solely for buyer’s own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. Diagnostic uses require a separate license.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References