Technical Data Sheet

BB515 Mouse Anti-Human CD96

Product Information

Material Number: 564774
Alternate Name: TACTILE; T cell activation increased late expression
Size: 100 Tests
Vol. per Test: 5 µl
Clone: 6F9
Immunogen: Human CD96 Transfected Cell Line
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 6F9 monoclonal antibody specifically binds to human CD96, also known as TACTILE (T cell activation increased late expression). CD96 is a type I transmembrane glycoprotein and member of the Ig superfamily. CD96 is expressed at low levels on resting natural killer (NK) cells and T cells and at high levels on activated NK and T cells. CD96 is also expressed on some T-cell leukemia and acute myeloid leukemia cells. CD96 may serve as a marker for acute myelogenous leukemia stem cells. CD96 plays a role in the adhesive interactions of activated NK and T cells during immune responses. CD96 binds to the poliovirus receptor (CD155) that is highly expressed by some tumor cells. CD155-mediated ligation of CD96 can induce NK cell-mediated cytotoxicity. CD96-mediated uptake of CD155 may adversely affect NK cells and thus reduce their effectiveness in anti-tumor responses.

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 (e.g., 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

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

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tr>
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<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>564416</td>
<td>BB515 Mouse IgG1, κ Isotype Control</td>
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<td>X40</td>
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<td>100 Tests</td>
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<td>555999</td>
<td>Lysing Buffer</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 × 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 wwwbdbiosciencescom/colors.
6. Please refer to wwwbdbiosciencescom/pharmingen/protocols for technical protocols.

References
Majeti R. Monoclonal antibody therapy directed against human acute myeloid leukemia stem cells. Oncogene. 2011; 30(9):1009-1019. (Biology)