Technical Data Sheet

FITC Mouse Anti-Human CD59

Product Information

Material Number: 560954
Alternate Name: HRF-20; MAC-inhibitory protein; MAC-IP; MACIF; MEM43; MIRL; Protectin; 1F5
Size: 25 Tests
Vol. per Test: 20 µl
Clone: p282 (H19)
Immunogen: Human Erythrocytes
Isotype: Mouse IgG2a, κ
Reactivity: Tested in Development: Rhesus, Cynomolgus, Baboon
Workshop: V SO06
Storage Buffer: Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The p282 (H19) monoclonal antibody specifically binds to CD59, a 19 kDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein, expressed on hematopoietic and non-hematopoietic cells. Because of its interaction with complement activated products, CD59 has been termed membrane-attack-complex-inhibitory factor (MACIF), homologus restriction factor (HRF20), membrane inhibitor of reactive lysis (MIRL) and Protectin. It inhibits the cytolytic activity of the complement system by binding to C8 and C9, thereby blocking the assembly of the membrane attack complex. CD59 also participates in spontaneous T-cell/erythrocyte adhesion, interacts with CD2, and plays a role in T-cell activation.

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 FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

<table>
<thead>
<tr>
<th>Application</th>
<th>Routinely Tested</th>
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<tr>
<td>Flow cytometry</td>
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Flow cytometric analysis of CD59 expression on human glycosylphosphatidylinositol (GPI) anchor-defective cell line (left panel) or K562 cells expressing GPI anchor protein (right panel). Whole blood was stained with either FITC Mouse IgG2a, κ Isotype Control (Cat. No. 555573; dashed line histograms) or FITC Mouse Anti-Human CD59 antibody (Cat. No. 555763/560954; solid line histograms). Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). Fluorescent histograms depicting CD59 (or Ig isotype control) staining were derived from gated events with the forward and side-light scatter characteristics of K562 cells. Flow cytometric analysis was performed using a BD FACScan™ Cytometer System.
<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
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<td>555573</td>
<td>FITC Mouse IgG2a, κ Isotype Control</td>
<td>100 Tests</td>
<td>G155-178</td>
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<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>555763</td>
<td>FITC Mouse Anti-Human CD59</td>
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<td>p282 (H19)</td>
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<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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<tr>
<td>555899</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 $1 \times 10^6$ 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. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

**References**


