**Product Information**

Material Number: 563782  
Alternate Name: MS4A1; B1; Bp35; LEU-16; S7  
Size: 100 tests  
Vol. per Test: 5 µl  
Clone: 2H7  
Immunogen: Human 6.16c1.3 B cell line  
Isotype: Mouse (C57BL/6) IgG2b, κ  
Reactivity: QC Testing: Human  
Workshop: II B2; III B739, NL382; IV B201  
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

The 2H7 monoclonal antibody specifically binds to CD20 that is encoded by the *MS4A1* (Membrane-spanning 4-domains, subfamily A, member 1) gene. CD20 is a 33-37 kDa unglycosylated four-transmembrane phosphoprotein. CD20 is expressed on pre-B-cells, resting and activated B cells and follicular dendritic cells but not on plasma cells. Low level CD20 expression is observed on a small subset of normal circulating T lymphocytes. The CD20 molecule is involved in the regulation of B-cell activation.

The antibody was conjugated to BD Horizon™ BUV395 which has been exclusively developed by BD Biosciences as an optimal dye for use on a 355 nm laser equipped instrument. With an Ex Max at 348 nm and an Em Max at 395 nm, this dye has virtually no spillover into any other detector. BD Horizon™ BUV395 can be excited with a 355 nm laser and detected with a 379/28 filter.

**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™ BUV395 under optimum conditions, and unconjugated antibody and free BD Horizon™ BUV395 were removed.
Application Notes

Flow cytometry Routinely Tested

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>563558</td>
<td>BUV395 Mouse IgG2b, κ Isotype Control</td>
<td>50 µg</td>
<td>27-35</td>
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<td>563781</td>
<td>BUV395 Mouse Anti-Human CD20</td>
<td>25 tests</td>
<td>2H7</td>
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<td>349202</td>
<td>BD FACS™ Lysing Solution</td>
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<td>555899</td>
<td>Lysing Buffer</td>
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<td>555415</td>
<td>APC Mouse Anti-Human CD19</td>
<td>25 tests</td>
<td>HIB19</td>
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<td>561742</td>
<td>APC Mouse Anti-Human CD19</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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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


Hultin LE, Hausner MA, Hultin PM, Giorgi JV. CD20 (pan-B cell) antigen is expressed at a low level on a subpopulation of human T lymphocytes. Cytometry. 1993; 14(2):193-204. (Biology)


