BD Pharmingen™

Technical Data Sheet

Purified Mouse Anti-Human CD20

Product Information

Material Number: 555677
Alternate Name: MS4A1; membrane-spanning 4-domains subfamily A member 1; B1; Bp35; LEU-16
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: H1 (also known as FB1)
Immunogen: Human B lymphoma cell line
Isotype: Mouse (BALB/c) IgG2a, κ
Reactivity: QC Testing: Human
Workshop: V cB010
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The H1 (FB1) antibody specifically binds to a cytoplasmic domain of CD20. CD20 is a 33-37-kDa four transmembrane phosphoprotein that is expressed by B lymphocytes from the pre-B stage and most malignant B cells and is lost during plasma cell differentiation. Low level CD20 expression is observed on a subset of normal circulating T lymphocytes, and CD20-positive T-cell lymphomas have been reported. The CD20 molecule is associated with membrane lipid raft domains, acts as a channel for calcium ions, and is involved in the regulation of B cell activation and survival. The cytoplasmic domain regions are serine and threonine rich and contain multiple phosphorylation consensus sequences.

Preparation and Storage

Store undiluted at 4°C. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

| Intracellular staining (flow cytometry) | Routinely Tested |
| Immunohistochemistry-formalin (antigen retrieval required) | Tested During Development |
| Immunohistochemistry-frozen | Tested During Development |

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555988</td>
<td>FITC Goat Anti-Mouse IgG/IgM</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>555571</td>
<td>Purified Mouse IgG2a, κ Isotype Control</td>
<td>0.1 mg</td>
<td>G155-178</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

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)