Purified Mouse Anti-Human CD180

Product Information

Material Number: 551890
Alternate Name: RP105; Lymphocyte antigen 64; LY64; Bgp95
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: G28-8
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: VII 70499
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The G28-8 monoclonal antibody specifically recognizes RP105/Bgp95, a 95-105 kDa type I membrane protein consisting of extracellular leucine-rich repeats and a short cytoplasmic domain. It is expressed on mantle zone B cells, but weakly on germinal center B cells. RP105/Bgp95 is also expressed on peripheral blood monocytes, dendritic cells, and a subset of peripheral blood lymphocytes. The extracellular domain associates with a molecule called MD-1 to form a cell surface receptor complex RP105/Bgp95/MD-1. This receptor belongs to the family of toll-like receptors (TLR). Studies show that RP105/Bgp95/MD-1, working in concert with TLR4, controls B cell recognition and signaling of lipopolysaccharide (LPS). Reports on functional studies show that G28-8 monoclonal antibody can induce a G0 to G1 cell cycle transition and was synergistic with PMA, anti-µ, or anti-CD40 in inducing proliferation of resting B cells.

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

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>555746</td>
<td>Purified Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
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<tr>
<td>555988</td>
<td>FITC Goat Anti-Mouse IgG/IgM</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
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<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>Lysing Buffer</td>
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<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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. 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


Mason D, David Mason ... et al., ed. Leucocyte typing VII : white cell differentiation antigens : proceedings of the Seventh International Workshop and Conference held in Harrogate, United Kingdom. Oxford: Oxford University Press; 2002(Clone-specific)

