Technical Data Sheet

Purified Mouse Anti-Human CD44

Product Information

Material Number: 550988
Alternate Name: Pgp-1; CSPG8; ECMR-III; Epican; H-CAM; HCELL; Hermes; HUTCH-I
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: 515
Immunogen: Human EBV-transformed Arent B Lymphoblastoid Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 515 monoclonal antibody specifically binds to CD44. CD44 is an 80-95 kDa type I transmembrane glycoprotein, also known as Phagocytic glycoprotein-1 (Pgp-1), or Extracellular matrix receptor type III (ECMR-III). CD44 is a member of the hyaladherin family of hyaluronan-binding proteins, with structural similarities to selectins. CD44 is the receptor for hyaluronic acid. CD44 is expressed on leucocytes, erythrocytes, epithelial cells and weakly on platelets. CD44 has functional roles in cell migration, lymphocyte homing and adhesion during hematopoiesis and lymphocyte activation. The 515 monoclonal antibody can reportedly block cellular adhesion to hyaluronic acid.

Preparation and Storage

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

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>
</tr>
</thead>
<tbody>
<tr>
<td>555746</td>
<td>Purified Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
</tr>
<tr>
<td>555988</td>
<td>FITC Goat Anti-Mouse IgG/IgM</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Flow cytometric analysis of CD44 expression on human peripheral blood lymphocytes. Whole blood was stained with either Purified Mouse Anti-Human CD44 (Cat. No. 550988; solid line histogram) or Purified Mouse IgG1, κ Isotype Control (Cat. No. 555746; dashed line histogram). Secondary staining was carried out with FITC Goat Anti-Mouse IgG/IgM (Cat. No. 555988) and erythrocytes were lysed with BD FACSTM Lysing Solution (Cat. No. 349202). Fluorescent histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes.
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