Technical Data Sheet

PE Rat Anti-Mouse CD70

Product Information

<table>
<thead>
<tr>
<th>Material Number:</th>
<th>555286</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Name:</td>
<td>CD27 ligand; CD27L; CD27LG; Tnfsf7; Ki-24 Antigen</td>
</tr>
<tr>
<td>Size:</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>Concentration:</td>
<td>0.2 mg/ml</td>
</tr>
<tr>
<td>Clone:</td>
<td>FR70</td>
</tr>
<tr>
<td>Immunogen:</td>
<td>BALB/c mouse B lymphoma A20.2J</td>
</tr>
<tr>
<td>Isotype:</td>
<td>Rat (F344) IgG2b, κ</td>
</tr>
<tr>
<td>Reactivity:</td>
<td>QC Testing: Mouse</td>
</tr>
<tr>
<td>Storage Buffer:</td>
<td>Aqueous buffered solution containing ≤0.09% sodium azide.</td>
</tr>
</tbody>
</table>

Description

The FR70 monoclonal antibody specifically binds to mouse CD70, a 30-33-kDa type-II transmembrane glycoprotein belonging to the TNF/NGF superfamily. CD70 is the ligand for CD27 and is expressed primarily on activated B cells. CD70 expression can be induced by activation of splenocytes with lipopolysaccharide and stimulatory antibodies specific for IgM, CD40 or both. mRNA coding for CD70 is transiently expressed after Concanavalin A stimulation of splenocytes or thymocytes. CD70 has been observed to be expressed on dendritic cells of Leishmania major-infected mice. The CD27-CD70 interaction delivers costimulatory signals to T cells and NK cells. It has been reported that FR70 antibody blocks binding of mCD27-Lg fusion protein to mouse Cd70-transfected cells and inhibits some in vitro T-cell- and NK-cell-dependent responses.

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

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>553989</td>
<td>PE Rat IgG2b, κ Isotype Control</td>
<td>0.1 mg</td>
<td>A95-1</td>
</tr>
<tr>
<td>553787</td>
<td>Purified NA/LE Rat Anti-Mouse CD40</td>
<td>0.5 mg</td>
<td>3/23</td>
</tr>
<tr>
<td>553057</td>
<td>Purified NA/LE Hamster Anti-Mouse CD3e</td>
<td>0.5 mg</td>
<td>145-2C11</td>
</tr>
<tr>
<td>553721</td>
<td>Purified NA/LE Hamster Anti-Mouse CD40</td>
<td>0.5 mg</td>
<td>HM40-3</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
</tbody>
</table>

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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References