Product Information

Material Number: 744612
Size: 50 µg
Clone: 2.11
Alternative Name: TCR V gamma 1.1; TCR Vg1.1; TCR V-gamma-1; TCR Vg1; Cr4
Reactivity: Mouse (Tested in Development)
IsoType: Armenian Hamster IgG
Immunogen: Mouse TCR ##+ T3.13.1 hybridoma cells
Application: Flow cytometry (Qualified)
Concentration: 0.2 mg/ml
Entrez Gene ID: [107692]
Storage Buffer: Aqueous buffered solution containing #0.09% sodium azide.
Regulatory Status: RUO

Description

The 2.11 monoclonal antibody recognizes the V#1.1 chain of the heterodimeric # T-cell receptor (TCR ##) expressed by T lymphocytes and NK-T cells. It does not react with TCR ##-bearing T cells. TCR ## associates with CD3 molecules to form the TCR ##/CD3 complex that mediates antigen recognition and can transduce intracellular signals leading to T cell responses. The V#1.1 TCR is also known as V#1 TCR. The V#1.1 variable region TCR gene segment primarily rearranges to join the J#4 and C#4 TCR gene segments. TCR V#1-expressing cells represent a major population of TCR ## cells in the adult mouse thymus, peripheral lymphoid tissues, and different epithelia. They constitute a minor population of TCR ##-positive T cells during fetal and early postnatal life.

The antibody was conjugated to BD Horizon™ BV786 which is part of the BD Horizon Brilliant™ Violet family of dyes. This dye is a tandem fluorochrome of BD Horizon BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 786-nm. BD Horizon BV786 can be excited by the violet laser and detected in a filter used to detect Cy™7-like dyes (eg, 780/60-nm filter).

Preparation and Storage Section

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 BV786 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS) RUO</td>
<td>500 mL</td>
<td></td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA) RUO</td>
<td>500 mL</td>
<td></td>
</tr>
<tr>
<td>563794</td>
<td>Brilliant Stain Buffer RUO</td>
<td>100 Tests</td>
<td></td>
</tr>
<tr>
<td>555899</td>
<td>Lysing Buffer RUO</td>
<td>100 mL</td>
<td></td>
</tr>
<tr>
<td>553141</td>
<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) 2.4G2 RUO</td>
<td>0.1 mg</td>
<td></td>
</tr>
</tbody>
</table>

Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.

3. Researchers should determine the optimal concentration of this reagent for their individual applications.

4. An isotype control should be used at the same concentration as the antibody of interest.

5. 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.

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


8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.

9. BD Horizon Brilliant Violet 786 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; 8,354,239.

10. Cy is a trademark of GE Healthcare.

References


Pereira P, Lafaille JJ, Gerber D, Tonegawa S. The T cell receptor repertoire of intestinal intraepithelial gammadelta T lymphocytes is influenced by genes linked to the major histocompatibility complex and to the T cell receptor loci. Proc Natl Acad Sci U S A. 1997; 94(11):5761-5766.