Technical Data Sheet

PE Rat Anti-Mouse IL-17A

Product Information

Material Number: 559502
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: TC11-18H10
Immunogen: Recombinant Mouse IL-17 Protein
Isotype: Rat IgG1, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The TC11-18H10 antibody reacts with recombinant and natural mouse IL-17A proteins. IL-17A, also known as CTLA-8, is a T cell-derived cytokine that promotes inflammatory responses. Mouse IL-17A is a proinflammatory cytokine that can induce the release of IL-6 by mouse stromal cells. It has been shown to support the growth of hemopoietic progenitors in vitro; it can also stimulate granulopoiesis in vivo. The TC11-18H10 antibody has been reported to neutralize IL-17A activity. Recent studies have shown that IL-17A is produced by a unique subset of Th17 cells that develop along a pathway distinct from the Th1- and Th2- cell differentiation pathways. The mouse IL-17A cDNA was isolated from a cDNA library generated from TCRαβ+CD4-CD8-thymocytes.

Preparation and Storage

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. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application
Intracellular staining (flow cytometry) Routinely Tested

Recommended Assay Procedure:

BD Biosciences

bdbiosciences.com

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD
Recommended Assay Procedure:
Immunofluorescent Staining and Flow Cytometric Analysis: The TC11-18H10 antibody is useful for immunofluorescent staining and flow cytometric analysis to identify and enumerate IL-17A producing cells within mixed cell populations. The PE-conjugated TC11-18H10 antibody (Cat. No. 559502) is especially suitable for these experiments (see image). For optimal immunofluorescent staining and flow cytometric analysis, this anti-cytokine antibody should be titrated (≤ 0.25 µg mAb/million cells). For specific methodology, please visit our website, www.bdbiosciences.com, and go to the protocols section or the chapter on intracellular staining in the Immune Function Handbook.

A useful control for demonstrating the specificity of staining is to pre-block paraformaldehyde-fixed/saponin-permeabilized target cells with unlabeled TC11-18H10 antibody (Cat. No. 559501) prior to staining. The intracellular staining technique and use of blocking controls are described in detail by C. Prussin and D. Metcalfe. A suitable rat IgG1 isotype control for assessing the level of background staining on paraformaldehyde-fixed/saponin-permeabilized mouse is PE-R3-34 (Cat. No. 554685); use at comparable concentrations to antibody of interest (e.g., ≤ 0.25 µg mAb/1 million cells).

OTHER APPLICATIONS
1. ELISA Capture: The purified TC11-18H10 antibody (Cat. No. 555068) is useful as a capture antibody for a sandwich ELISA for measuring mouse IL-17A protein levels. Purified TC11-18H10 antibody can be paired with the biotinylated TC11-8H4 (Cat. No.555067) antibody as the detecting antibody, with recombinant mouse IL-17A protein as the standard. The purified TC11-18H10 antibody should be titrated from 0.5 µg/ml to 2.0 µg/ml to determine its optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of mouse IL-17A ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit our website, www.bdbiosciences.com, and go to the protocols section or ELISA in the Immune Function Handbook.

2. Western blotting: The TC11-1810 antibody has been found useful for Western Blotting. Please note that this application is not routinely tested at BD Biosciences Pharmingen.

3. Neutralization: TCII-18H10 has been shown to be a neutralizing antibody. Please note that this application is not routinely tested at BD Biosciences.

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555029</td>
<td>Protein Transport Inhibitor (Containing Brefeldin A)</td>
<td>1.0 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>554685</td>
<td>PE Rat IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>R3-34</td>
</tr>
<tr>
<td>555028</td>
<td>BD Cytofix/Cytoperm Plus Kit (with BD GolgiPlug)</td>
<td>250 tests</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Product Notices
1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
4. 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.

References