Technical Data Sheet

PE Mouse Anti-Human TRIF (TICAM-1)

Product Information
Material Number: 566354
Alternate Name: TICAM1; PRVTIRB; MyD88-3; IIAE6
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: U19-709
Immunogen: Human TRIF Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
The U19-709 monoclonal antibody specifically recognizes TIR domain-containing adapter inducing IFN-β (TRIF), which is also known as TIR domain-containing adapter molecule 1 (TICAM-1). TRIF (TICAM-1) is an intracellular adaptor protein that contains a Toll/Interleukin-1 Receptor (TIR) homology domain. Double stranded RNA (dsRNA)-bound Toll-like receptor 3 (TLR3/CD283) or lipopolysaccharide (LPS)-triggered TLR4/CD284 can interact with TRIF (TICAM-1). This leads to downstream signaling cascades involving Interferon regulatory factors (e.g., IRF3 or IRF7) or nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB) that induce Interferon-beta (IFN-β) expression.

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

Fluorescent staining and flow cytometry analysis of TRIF (TICAM-1) expression in peripheral blood lymphocytes. Peripheral blood mononuclear cells (PBMCs) were fixed and permeabilized with BD Cytofix/Cytoperm™ Fixation and Permeabilization Solution (Cat. No. 554722). The cells were then washed and stained in BD Perm/Wash™ Buffer (Cat. No. 554729) with either PE Mouse IgG1, κ Isotype Control (Cat. No. 554680; dashed line histogram) or PE Mouse Anti-Human TRIF (TICAM-1) antibody (Cat. No. 566354; solid line histogram) at 0.5 µg/test. The histogram showing TRIF (TICAM-1) expression (or Ig Isotype control staining) was derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes.

Flow cytometric analysis was performed using a BD LSRFortessa™ X-20 Cell Analyzer System. Data shown on this Technical Data Sheet are not lot specific.

Western blots of human Raji cells and PBMCs expressing TRIF (TICAM-1) proteins. Proteins from Raji (Burkitt’s B cell lymphoma, ATCC CCL-86; Lane 1) cell line or PBMC (Lane 2) lysates were resolved by SDS-PAGE, blotted, and then probed with 1 µg/ml of Purified Mouse Anti-Human TRIF (TICAM-1) antibody followed by HRP-conjugated Goat Anti-Mouse IgG (Cat. No. 554002), and ECL detection reagents. TRIF (TICAM-1) was identified as protein bands of ~95-100 kDa.

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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

<table>
<thead>
<tr>
<th>Intracellular staining (flow cytometry)</th>
<th>Routinely Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western blot</td>
<td>Tested During Development</td>
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</table>

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)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>554680</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
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<td>MOPC-21</td>
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<tr>
<td>554722</td>
<td>Fixation and Permeabilization Solution</td>
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<tr>
<td>554723</td>
<td>Perm/Wash Buffer</td>
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<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Ig</td>
<td>1 mL</td>
<td>(none)</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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciencescomcolors.
5. Please refer to wwwbdbiosciencescompharmingenprotocols for technical protocols.

References

Fitzgerald KA, Rowe DC, Barnes BJ, et al. LPS-TLR4 signaling to IRF-3/7 and NF-kappaB involves the toll adapters TRAM and TRIF. J Exp Med. 2003; 198(7):1043-55. (Biology)