Technical Data Sheet

PE Mouse Anti-Human TNF

Product Information

Material Number: 559321
Alternate Name: Tumor necrosis factor alpha; TNF-α; TNFSF2; Cachectin
Size: 100 Tests
Vol. per Test: 20 µl
Clone: MAb11
Immunogen: Recombinant Human TNF
Isotype: Mouse IgG1, κ
Reactivity: Tested in Development: Rhesus, Cynomolgus, Baboon
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The MAb11 monoclonal antibody specifically binds to human tumor necrosis factor (TNF, also known as TNF-α) protein. TNF is an efficient juxtacrine, paracrine and endocrine mediator of inflammatory and immune functions. It regulates the growth and differentiation of a variety of cell types. TNF is cytotoxic for transformed cells when in conjunction with IFN-γ. It is secreted by activated monocytes/macrophages and other cells such as B cells, T cells and fibroblasts. The immunogen used to generate the MAb11 hybridoma was recombinant human TNF. The MAb11 antibody has been reported to crossreact with Rhesus Macaque TNF.

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

Intracellular staining (flow cytometry) Routinely Tested

Recommended Assay Procedure:

Immunofluorescent Staining and Flow Cytometric Analysis: The PE conjugated MAb11 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify and enumerate TNF producing cells within mixed cell populations (see Figure). This 100 Test Size formulation of the PE-conjugated MAb11 antibody has been pre-titrated to assure effective intracellular detection of human TNF using 20 µl/1 x 10⁶ cells. The staining technique and use of blocking controls are described in detail by C. Prussin and D. Metcalfe. For specific methodology, please visit the protocols section under “Cytokines (Intracellular Staining)” and “Intracellular Flow” posted on our web site, http://www.bdbiosciences.com/us/s/resources.
Important Note: This pre-titered antibody solution does not contain a cell permeabilization agent. It is necessary to include a cell permeabilization agent when using the pre-titered antibody solution to stain fixed and permeabilized cells. Perm/Wash™ Buffer (Cat. No. 554723) contains the permeabilization agent saponin and is useful for this purpose as described in the USAGE section below.

USAGE
1. Resuspend 1 x 10^6 fixed and permeabilized cells in 20 µl of the pre-titered antibody solution and 30 µl of 1X Perm/Wash™ Buffer (Cat. No. 554723).
2. Incubate the cell suspension for 15 minutes (at RT or 4°C).
3. Wash twice in 100 µl of 1X Perm/Wash™ Buffer (Cat. No. 554723).

Suggested Companion Products

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<td>559320</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
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<td>MOPC-21</td>
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<td>554513</td>
<td>PE Mouse Anti-Human TNF</td>
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<td>554618</td>
<td>Recombinant Human TNF</td>
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<tr>
<td>554723</td>
<td>Perm/Wash Buffer</td>
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Product Notices
1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 x 10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.

References