

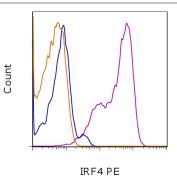
An Affymetrix Company

# Anti-Human/Mouse IRF4 PE

Catalog Number: 12-9858

Also known as: Interferon regulatory factor 4

RUO: For Research Use Only. Not for use in diagnostic procedures.



Normal human peripheral blood cells were either unstimulated (blue historgam) or stimulated for 3 days with Anti-Human CD3 (cat. 16-0037) and Anti-Human CD28 (cat. 16-0289) (purple histogram). Cells were then fixed and permeabilized with the Foxp3 Fixation/Permeabilization Set (cat. 00-5523) and stained with Anti-Human CD4 FITC (cat. 11-0049) and 0.06 ug Anti-Human/Mouse IRF4 PE. CD4 positive cells were used for analysis and staining of stimulated cells with Rat IgG1 K Isotype Control PE (cat. 12-4301) (orange histogram) is included.

### **Product Information**

Contents: Anti-Human/Mouse IRF4 PE

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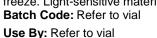
Clone: 3E4

Concentration: 0.2 mg/mL Host/Isotype: Rat IgG1, kappa



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer **Temperature Limitation:** Store at 2-8°C. Do not

freeze. Light-sensitive material.





## Description

The monoclonal antibody 3E4 reacts with human and mouse interferon regulatory factor 4 (IRF4). IRF4 is a 52 kDa transcription factor with roles in B cell, T cell and macrophage function. In B cells, IRF4 is highly expressed in mature plasma cells and plays a crucial role in their differentiation. IRF4 has been shown to interact with PU.1 and control the transcription of many B cell-specific genes including *Prdm1*, which encodes Blimp1. In T cells, IRF4 has been implicated in regulatory T (Treg), Th2, Th9 and Th17 cell development and function. This transcription factor is upregulated upon T cell activation and is expressed in mature T cells. Studies have shown that IRF4 directly induces Blimp1 expression in Tregs, leading to IL-10 expression. IRF4 has also been demonstrated to be involved in macrophage polarization and regulation. Lastly, in addition to its roles in normal immune function, IRF4 expression has been reported to be upregulated in many blood-related cancers.

### **Applications Reported**

This 3E4 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

### **Applications Tested**

This 3E4 antibody has been tested by intracellular staining and flow cytometric analysis of mouse splenocytes using the Foxp3 Buffer Set (cat. 00-5523). This can be used at less than or equal to 0.125  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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#### **Related Products**

00-5523 Foxp3 / Transcription Factor Staining Buffer Set 11-0049 Anti-Human CD4 FITC (RPA-T4) 12-4301 Rat IgG1 K Isotype Control PE 16-0037 Anti-Human CD3 Functional Grade Purified (OKT3) 16-0289 Anti-Human CD28 Functional Grade Purified (CD28.2) 65-0865 Fixable Viability Dye eFluor® 780