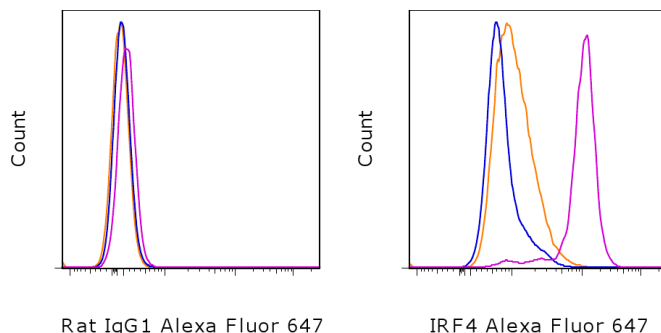


## Anti-Human/Mouse IRF4 Alexa Fluor® 647 (To be Discontinued. Refer to Cat. No. 50-9858)

**Catalog Number:** 51-9858

**Also known as:** Interferon regulatory factor 4


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



Sheep red blood cell-immunized C57Bl/6 splenocytes were surface stained, fixed and permeabilized using the Foxp3 Staining Buffer Set (cat. 00-5523), and then stained intracellularly with 0.125 µg of Rat IgG1 K Isotype Control Alexa Fluor® 647 (cat. 51-4301) (left) or 0.125 µg of Anti-Human/Mouse IRF4 Alexa Fluor® 647 (right). Samples were gated on CD4+ Foxp3- (blue histogram), CD4+ Foxp3+ (orange histogram), and CD138+ B220- (purple histogram). Total viable and singlet-gated lymphocytes were used for analysis.

### Product Information

**Contents:** Anti-Human/Mouse IRF4 Alexa Fluor® 647 (To be Discontinued. Refer to Cat. No. 50-9858)

 **Catalog Number:** 51-9858

**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.

**Batch Code:** Refer to vial

**Use By:** Refer to vial



 **LOT**



### 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

Anti-Human/Mouse IRF4 Alexa Fluor® 647 has been reported for use in intracellular staining followed by flow cytometric analysis.

### Applications Tested

Anti-Human/Mouse IRF4 Alexa Fluor® 647 has been tested by intracellular staining and flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. 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.

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### **Related Products**

51-4301 Rat IgG1 K Isotype Control Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-4301)

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