

## Alexa Fluor<sup>®</sup> 647 anti-IRF4 Antibody

<b>Catalog# / Size</b>	646407 / 25 µg 646408 / 100 µg
<b>Clone</b>	IRF4.3E4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interferon regulatory factor 4
<b>Isotype</b>	Rat IgG1, κ
<b>Description</b>	The IRF family consists of at least nine members. IRF4 and IRF8 are highly homologous to each other and also redundant in function. IRF4 is critical for Th2 and Th17 development. Together with TRF8, it plays an essential role in macrophage and dendritic cell development and function. IRF4 is also reported to be essential for pre-B cell development, receptor editing, germinal center reactor and plasma cell differentiation.

### Product Details

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<b>Verified Reactivity</b>	Mouse, Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	GST fusion protein containing C-terminal of murine IRF4
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor <sup>®</sup> 647 under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.  * Alexa Fluor <sup>®</sup> 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.  Alexa Fluor <sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: spatial biology (IBEX) <sup>3,4</sup> .
<b>Application References</b>	1. Zheng Y, <i>et al.</i> 2009. <i>Nature</i> 458:351 2. Yin SY, <i>et al.</i> 2011. <i>Exp Cell Res.</i> 317:2210. <a href="#">PubMed</a> 3. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) <a href="#">PubMed</a> 4. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) <a href="#">PubMed</a>

<b>Product Citations</b>	1. Wang D, <i>et al.</i> 2018. <i>Immunity.</i> 48:659. <a href="#">PubMed</a> 2. Mondala PK, <i>et al.</i> 2021. <i>Cell Stem Cell.</i> 28(4):623-636.e9. <a href="#">PubMed</a> 3. Qian J, <i>et al.</i> 2021. <i>Int J Mol Sci.</i> 22:.. <a href="#">PubMed</a> 4. Mansouri S, <i>et al.</i> 2020. <i>Mucosal Immunol.</i> 0.954861111. <a href="#">PubMed</a> 5. Martínez-Fábregas J, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108545. <a href="#">PubMed</a>
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6. Guendel F, *et al.* 2020. *Immunity*. 53(5):1015-1032.e8. [PubMed](#)
7. Kiuchi M, *et al.* 2021. *J Exp Med*. 218:.. [PubMed](#)
8. Vora AA, *et al.* 2021. *STAR Protocols*. 2(2):100565. [PubMed](#)
9. Chen PM, *et al.* 2022. *Sci Adv*. 8:eabo4271. [PubMed](#)

**RRID** AB\_2564047 (BioLegend Cat. No. 646407)  
 AB\_2564048 (BioLegend Cat. No. 646408)

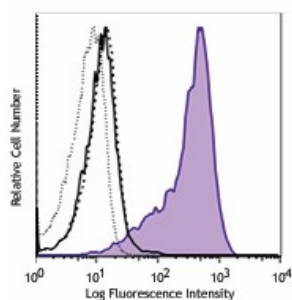
## Antigen Details

<b>Structure</b>	Molecular weight is approximately 51 kD.
<b>Distribution</b>	IRF4 is reported to be expressed exclusively in the immune system.
<b>Biology Area</b>	Cell Biology, Transcription Factors
<b>Molecular Family</b>	Nuclear Markers
<b>Antigen References</b>	1. Lu R. 2008. <i>Trends Immunol</i> 29:487.
<b>Gene ID</b>	<a href="#">3662</a>

## Other Formats

Alexa Fluor® 488 anti-IRF4, Purified anti-IRF4, PE anti-IRF4, Alexa Fluor® 647 anti-IRF4, Go-ChIP-Grade™ Purified anti-IRF4, PE/Cyanine7 anti-IRF4, PerCP/Cyanine5.5 anti-IRF4, Alexa Fluor® 594 anti-IRF4, Pacific Blue™ anti-IRF4

## Product Data



PHA-stimulated (3 days) or freshly isolated human peripheral lymphocytes were fixed and permeabilized with FOXP3 Fix/Perm Buffer Set. Cells were then stained with IRF4 (clone IRF4.3E4) Alexa Fluor® 647 (open histogram with solid line: unstimulated cells, filled histogram: stimulated cells) or rat IgG1, κ Alexa Fluor® 647 isotype control (dashed line: unstimulated cells, dotted line: stimulated cells).

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