

## Go-ChIP-Grade™ Purified anti-IRF4 Antibody

<b>Catalog# / Size</b>	646411 / 25 µg 646412 / 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.
<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.
<b>Application</b>	<a href="#">ChIP - Quality tested</a> <a href="#">WB - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by ChIP Assay. The suggested dilution for ChIP application is 1:50 - 1:200 by volume. For Western blotting, the suggested use of this reagent is 10.0 µg per ml. It is recommended that the reagent to be titrated for optimal performance before each experiment.
<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>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Huanosta-Murillo E, <i>et al.</i> 2021. <i>Front Immunol.</i> 12:668369. <a href="#">PubMed</a> 2. Ajore R, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:151. <a href="#">PubMed</a>
<b>RRID</b>	AB_2728477 (BioLegend Cat. No. 646411) AB_2728478 (BioLegend Cat. No. 646412)

### Antigen Details

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<b>Structure</b>	Molecular weight is approximately 51 kD.
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<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>

## Related Protocols

[BioLegend's Tools for Chromatin Immunoprecipitation \(ChIP\) Assays - Video](#)

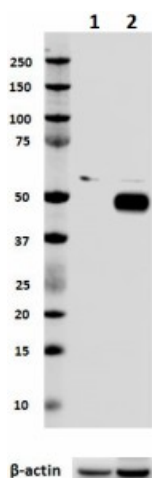
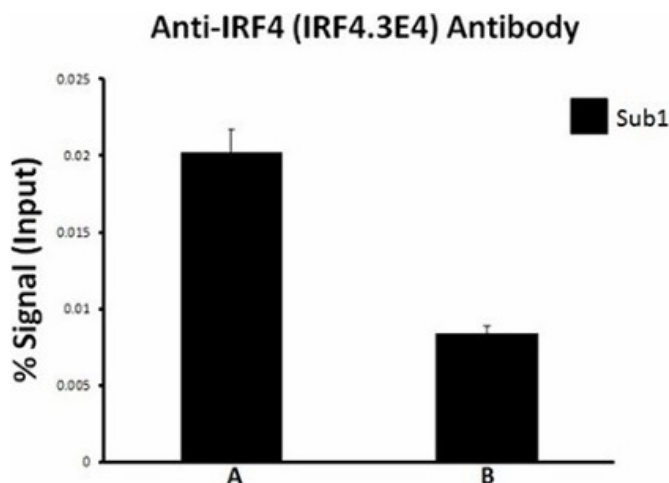
[Chromatin Immunoprecipitation \(ChIP\) Assay Protocol](#)

[Western Blotting Protocol](#)

## 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



Chromatin Immunoprecipitation (ChIP) was performed using Go-ChIP-Grade™ Protein G Enzymatic Kit by loading 3 µg of cross-linked chromatin samples from U266 cells treated with IFNα2 with either A) 1:200 dilution of Go-ChIP-Grade™ Purified anti-IRF4 (Clone IRF4.3E4), or B) equal amount of Purified Rat IgG1, κ isotype Control Antibody (Cat. No. 400401). The enriched DNA was purified and quantified by real-time qPCR using primers targeting human SUB1 gene region. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the 5% of total amount of input chromatin.

Total lysates (15 µg protein) from HeLa (lane 1, negative control) and Ramos (lane 2) were resolved by electrophoresis (4-12% Bis-Tris midi gel), transferred to nitrocellulose, and probed with 1:250 diluted (2 µg/mL) Purified anti-IRF4 Antibody, clone IRF4.3E4 (upper). Proteins were visualized by chemiluminescence detection using a 1:3000 diluted anti-rat-IgG secondary antibody conjugated to HRP for the anti-IRF4 Antibody or 1:5000 diluted Direct-Blot™ HRP anti-β-actin Antibody, clone 2F1-1(lower). Lane M: Molecular weight ladder.

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