

Purified anti-IRF4 Antibody

Catalog# / Size	646402 / 100 µg
Clone	IRF4.3E4
Regulatory Status	RUO
Other Names	Interferon regulatory factor 4
Isotype	Rat IgG1, κ
Description	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

Verified Reactivity	Mouse, Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	GST fusion protein containing C-terminal of murine IRF4
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested ChIP - Verified ICFC - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 10 µg/ml. For ChIP applications, the suggested dilution is 1:50-1:200 by volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: spatial biology (IBEX) ^{3,4} .
Application References	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. PubMed 3. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed 4. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
Product Citations	1. Gern BH, <i>et al.</i> 2021. <i>Cell Host Microbe.</i> 29(4):594-606.e6. PubMed 2. Wei SC, <i>et al.</i> 2019. <i>Immunity.</i> 50:1084. PubMed 3. Tian Y, <i>et al.</i> 2019. <i>Cell Rep.</i> 29:4482. PubMed 4. Liu F, <i>et al.</i> 2020. <i>J Immunother Cancer.</i> 8:. PubMed 5. Oba T, <i>et al.</i> 2021. <i>J Immunother Cancer.</i> 9:. PubMed 6. Trudu M, <i>et al.</i> 2022. <i>Front Oncol.</i> 12:968208. PubMed 7. Kakaradov B, <i>et al.</i> 2017. <i>Nat Immunol.</i> 18:422. PubMed 8. Cytlak U, <i>et al.</i> 2020. <i>Immunity.</i> 53(2):353-370. PubMed 9. Leylek R, <i>et al.</i> 2020. <i>Cell Rep.</i> 32:108180. PubMed 10. Yin S, <i>et al.</i> 2011. <i>Exp Cell Res.</i> 317:2210. PubMed
RRID	AB_2280462 (BioLegend Cat. No. 646402)

Antigen Details

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

Related Protocols

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

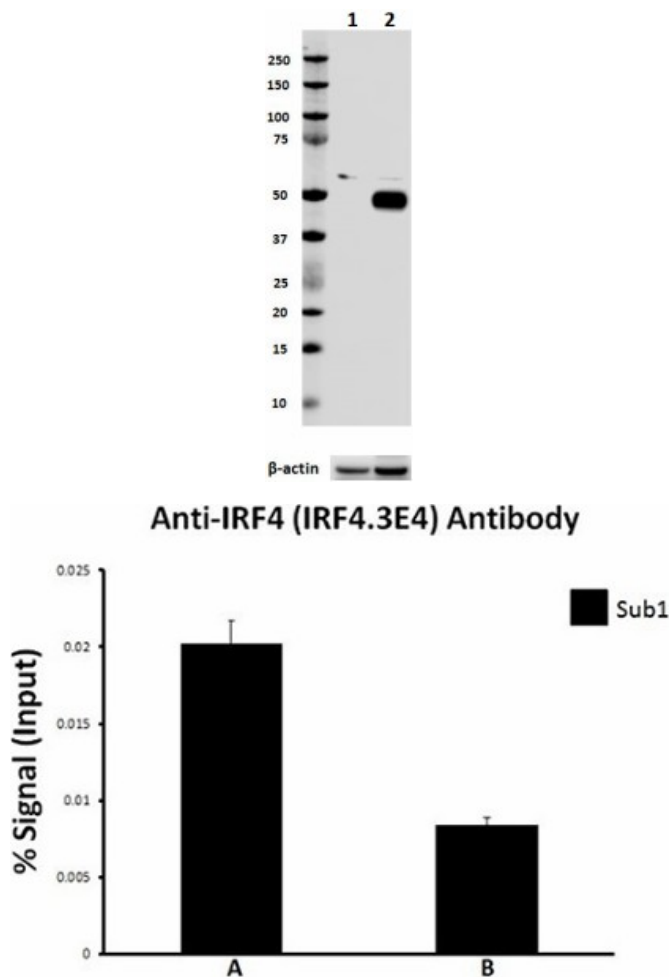
[Chromatin Immunoprecipitation \(ChIP\) Assay Protocol](#)

[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



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.

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.

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