

## Product datasheet

# Anti-IRF5 antibody [10T1] ab33478

KO VALIDATED

★★★★☆ [3 Abreviews](#) [16 References](#) [8 Images](#)

### Overview

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<b>Product name</b>	Anti-IRF5 antibody [10T1]
<b>Description</b>	Mouse monoclonal [10T1] to IRF5
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant human IRF-5 (176-240 aa, isoform D) purified from E. coli. NCBI Accession No.: NP_001092099 (formally NP_002191).
<b>Positive control</b>	WB: Extracts of Ramos, THP-1 and A20 cells. Flow Cyt (Intra): THP-1 cells. ICC/IF: THP-1, Raw264.7 and HEK293.
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 24/01/2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.1% Sodium azide Constituent: 99% PBS
<b>Purity</b>	Protein G purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	10T1
<b>Myeloma</b>	Sp2/0
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab33478 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>Flow Cyt (Intra)</b>		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
<b>ICC/IF</b>		Use at an assay dependent concentration.
<b>WB</b>	★★★★★ (1)	Use at an assay dependent concentration. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).

## Target

### Involvement in disease

Genetic variations in IRF5 are associated with susceptibility to inflammatory bowel disease type 14 (IBD14) [MIM:612245]. IBD14 is a chronic, relapsing inflammation of the gastrointestinal tract with a complex etiology. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may affect any part of the gastrointestinal tract from the mouth to the anus, but most frequently it involves the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints.

Genetic variations in IRF5 are associated with susceptibility to systemic lupus erythematosus type 10 (SLEB10) [MIM:612251]. Systemic lupus erythematosus (SLE) is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.

Genetic variations in IRF5 are a cause of susceptibility to rheumatoid arthritis (RA) [MIM:180300]. It is a systemic inflammatory disease with autoimmune features and a complex genetic component. It primarily affects the joints and is characterized by inflammatory changes in the synovial membranes and articular structures, widespread fibrinoid degeneration of the collagen fibers in mesenchymal tissues, and by atrophy and rarefaction of bony structures.

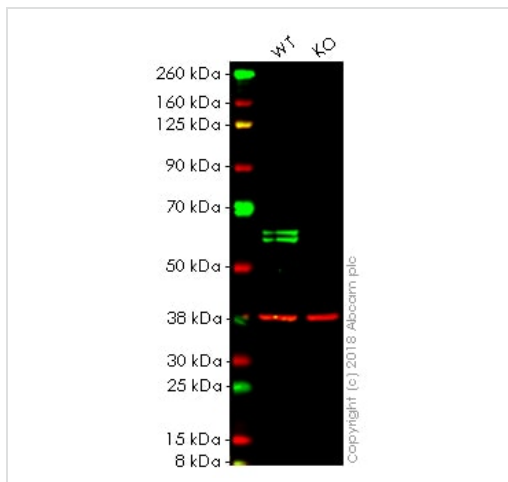
### Sequence similarities

Belongs to the IRF family.

Contains 1 IRF tryptophan pentad repeat DNA-binding domain.

### Cellular localization

Nucleus.



Western blot - Anti-IRF5 antibody [10T1] (ab33478)

**All lanes** : Anti-IRF5 antibody [10T1] (ab33478) at 1/500 dilution

**Lane 1** : Wild-type HAP1 whole cell lysate

**Lane 2** : IRF5 knockout HAP1 whole cell lysate

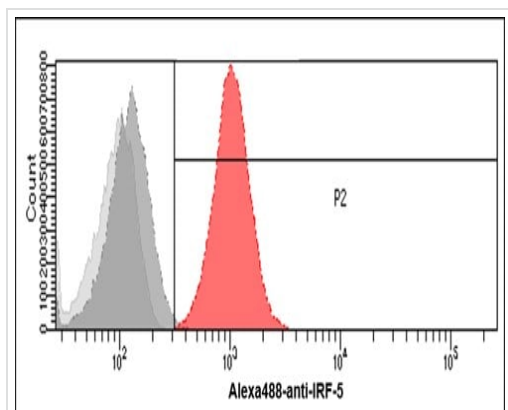
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 58 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab33478 observed at 56 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

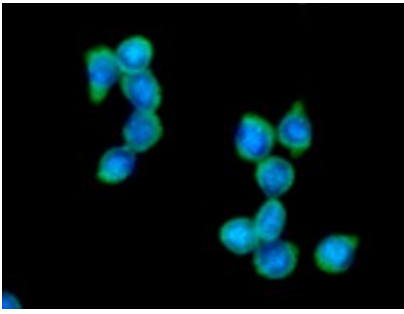
ab33478 was shown to specifically react with IRF5 in wild-type HAP1 cells as signal was lost in IRF5 knockout cells. Wild-type and IRF5 knockout samples were subjected to SDS-PAGE. Ab33478 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

**This image was produced using the ascites version of this antibody.**



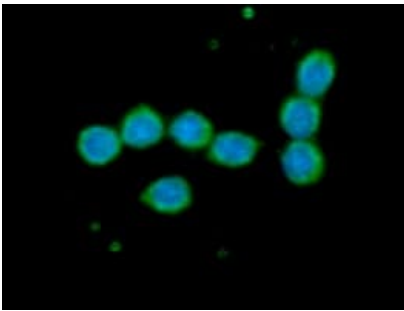
Flow Cytometry (Intracellular) - Anti-IRF5 antibody [10T1] (ab33478)

Flow cytometry analysis of IRF5 in THP-1 cell line, staining at 2-5µg for 1x10<sup>6</sup> cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



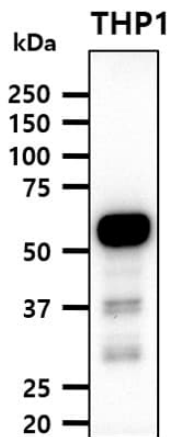
Immunocytochemistry/ Immunofluorescence - Anti-IRF5 antibody [10T1] (ab33478)

Immunocytochemistry/ Immunofluorescence analysis of IRF5 in Raw264.7 cells. The cell was stained with ab33478 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Immunocytochemistry/ Immunofluorescence - Anti-IRF5 antibody [10T1] (ab33478)

Immunocytochemistry/ Immunofluorescence analysis of IRF5 in THP-1 cells. The cell was stained with ab33478 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



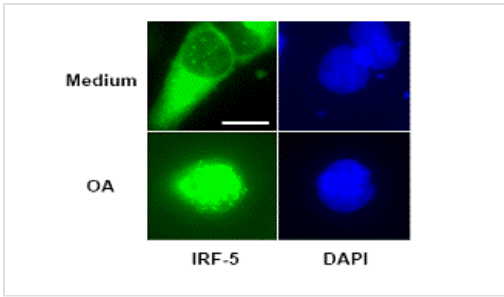
Western blot - Anti-IRF5 antibody [10T1] (ab33478)

Anti-IRF5 antibody [10T1] (ab33478) at 1/1000 dilution + THP-1 cell lysate

**Secondary**

Goat anti-mouse secondary antibody conjugated to HRP

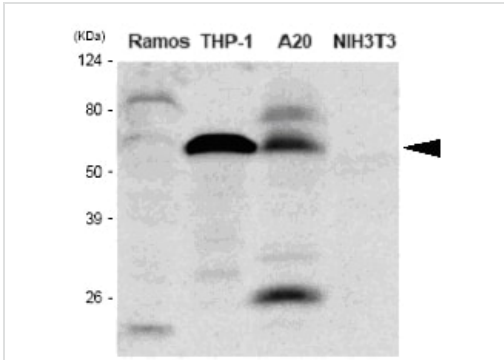
**Predicted band size: 58 kDa**



Immunocytochemistry/ Immunofluorescence - Anti-IRF5 antibody [10T1] (ab33478)

Immunofluorescence/Immunocytochemistry analysis of HEK293 cells ( $10^5$ - $10^6$ ) stained with Mouse monoclonal [10T1] to IRF5 (ab33478 1/100-1/200).

**This image was produced using the ascites version of this antibody.**



Western blot - Anti-IRF5 antibody [10T1] (ab33478)

**All lanes :** Anti-IRF5 antibody [10T1] (ab33478) at 1/1000 dilution

**Lane 1 :** Ramos cell lysate

**Lane 2 :** THP-1 cell lysate

**Lane 3 :** A20 cell lysate

**Lane 4 :** NIH 3T3 cell lysate

#### Secondary

**All lanes :** goat anti-mouse secondary antibody conjugated to HRP

Developed using the ECL technique.

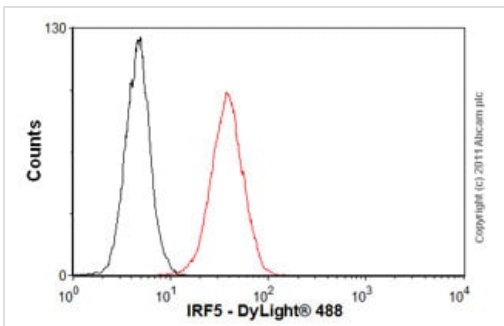
**Predicted band size:** 58 kDa

**Observed band size:** 58 kDa

**Additional bands at:** 26 kDa, 80 kDa. We are unsure as to the identity of these extra bands.

100-200µg of whole cell lysates were used for western blotting.

**This image was produced using the ascites version of this antibody.**



Flow Cytometry (Intracellular) - Anti-IRF5 antibody [10T1] (ab33478)

Overlay histogram showing THP1 cells stained with ab33478 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab33478, 1µg/ $1 \times 10^6$  cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/ $1 \times 10^6$  cells) used under the same

conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in THP1 cells fixed with 80% methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

**This image was produced using the ascites version of this antibody.**

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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