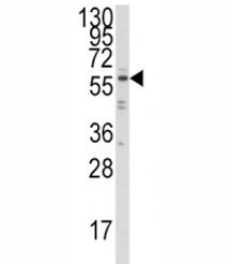
IRF5 Antibody / Innate Immune Transcription Factor Antibody (F48241)

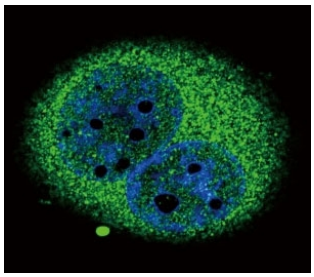
Catalog No.	Formulation	Size
F48241-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48241-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

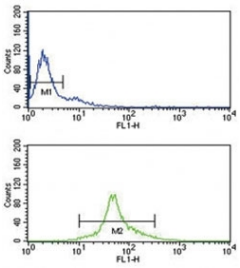
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Bovine
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q13568
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This IRF5 Antibody / Innate Immune Transcription Factor Antibody is available for research use only.



IRF5 Antibody Human Ramos Cell WB. Western blot analysis was performed using IRF5 Antibody on human Ramos cell lysate. A distinct immunoreactive band is detected at approximately 57 kDa, consistent with the expected molecular weight of IRF5. The blot exhibits a clean, specific signal with minimal background, supporting reliable detection of endogenous IRF5 in Ramos cells. These results demonstrate that this Innate Immune Transcription Factor Antibody is suitable for Western blot detection of IRF5 in human immune cell lysates.



IRF5 Antibody A549 Cell IF. Confocal immunofluorescence was performed on human A549 cells using IRF5 Antibody, followed by an Alexa Fluor 488-conjugated goat anti-rabbit IgG secondary antibody (green). Nuclei were counterstained with DAPI (blue). Prominent cytoplasmic staining with detectable nuclear localization is observed, consistent with the subcellular distribution of IRF5 in A549 cells. These results demonstrate that this Innate Immune Transcription Factor Antibody is suitable for confocal immunofluorescent detection of IRF5 in cultured human cells.



IRF5 Antibody Ramos Cell FACS. Flow cytometric analysis was performed on human Ramos cells using IRF5 Antibody, followed by an FITC-conjugated goat anti-rabbit IgG secondary antibody. The blue histogram represents the negative control, while the green histogram represents cells stained with the IRF5 antibody. A clear rightward shift of the IRF5-stained cell population relative to the negative control demonstrates specific antibody binding and confirms IRF5 expression in Ramos cells. These results demonstrate that this Innate Immune Transcription Factor Antibody is suitable for flow cytometric detection of IRF5.

Description

IRF5 Antibody recognizes Interferon Regulatory Factor 5, a sequence-specific transcription factor encoded by the IRF5 gene that serves as a central regulator of innate immune responses. Following activation by pattern recognition receptors, particularly Toll-like receptors, IRF5 undergoes phosphorylation and nuclear translocation, where it promotes transcription of genes involved in antiviral defense and inflammatory cytokine production. Through regulation of type one interferons and numerous proinflammatory mediators, IRF5 plays an essential role in coordinating early host immune responses to infection. NSJ Bioreagents supplies this IRF5 Antibody to support reliable detection of this Innate Immune Transcription Factor in diverse research applications.

IRF5 functions downstream of MyD88-dependent Toll-like receptor signaling and contributes to the expression of cytokines including tumor necrosis factor, interleukin 6, interleukin 12, and additional inflammatory mediators. Activation of IRF5 influences macrophage polarization toward a proinflammatory phenotype while also regulating dendritic cell activation, B-cell function, and antiviral immunity. Because IRF5 integrates signals from multiple innate immune pathways, it has become an important molecule for studying host defense, inflammation, and immune cell activation. Researchers frequently use IRF5 Antibody to investigate signaling events that govern cytokine production and transcriptional regulation during innate immune responses.

Altered IRF5 expression or activity has been implicated in autoimmune disease, chronic inflammatory disorders, infectious disease, cardiovascular disease, and cancer. Genetic variants within the IRF5 locus have been strongly associated with systemic lupus erythematosus and several additional autoimmune conditions, highlighting the importance of tightly regulated IRF5 signaling. Consequently, IRF5 is widely studied as both a biomarker of immune activation and a potential therapeutic target for diseases characterized by excessive or dysregulated inflammation. Investigators commonly analyze IRF5 together with IRF3, IRF7, NF-kappaB, STAT1, and other transcription factors to better understand innate immune signaling networks.

IRF5 Antibody supports investigations of innate immunity by enabling analysis of IRF5 expression and cellular localization in experimental systems. Detection of this Innate Immune Transcription Factor contributes to a deeper understanding of antiviral defense, inflammatory signaling, macrophage biology, cytokine regulation, and the molecular mechanisms that coordinate early immune responses.

Explore our Immunology Antibodies page to discover additional antibodies for studying innate and adaptive immune responses, cytokine signaling, host defense, and immune cell regulation.

Application Notes

Titration of the IRF5 Antibody / Innate Immune Transcription Factor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 81-108 from the human protein was used as the immunogen for this IRF5 antibody.

Storage

Aliquot the IRF5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Innate Immune Transcription Factor antibody, Interferon Regulatory Factor 5 antibody, IRF-5 antibody, Interferon Response Factor 5 antibody, Virus Activated Transcription Factor antibody, Interferon Regulatory Protein 5 antibody

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