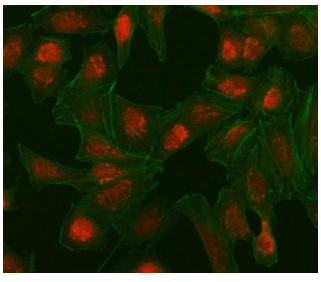
Interferon Regulatory Factor 5 Antibody / IRF5 Antibody (RQ8687)

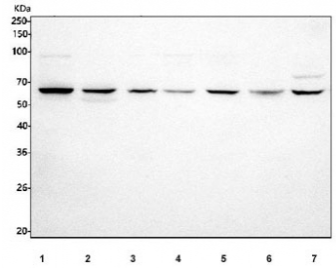
Catalog No.	Formulation	Size
RQ8687	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

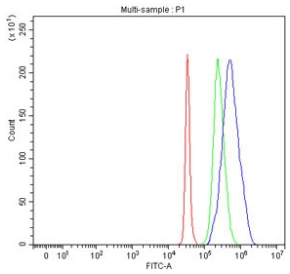
Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13568
Localization	Nuclear, cytoplasmic
Applications	Western blot: 1-2ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This Interferon Regulatory Factor 5 Antibody / IRF5 Antibody is available for research use only.



Interferon Regulatory Factor 5 Antibody A549 Cell IF. Immunofluorescence staining was performed on FFPE human A549 cells using Interferon Regulatory Factor 5 Antibody (red). Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 minutes prior to staining. Phalloidin-AF488 (green) was used to visualize the actin cytoskeleton. Distinct nuclear staining of IRF5 is observed with minimal background, consistent with the function of IRF5 as a transcription factor. These results demonstrate that this IRF5 Antibody is suitable for immunofluorescent detection of Interferon Regulatory Factor 5 in formalin-fixed, paraffin-embedded human cells.



Interferon Regulatory Factor 5 Antibody Human, Rat and Mouse Cell WB. Western blot analysis was performed using Interferon Regulatory Factor 5 Antibody. Lane 1: human HeLa cell lysate; lane 2: human A549 cell lysate; lane 3: human SH-SY5Y cell lysate; lane 4: rat PC-12 cell lysate; lane 5: rat C6 cell lysate; lane 6: mouse RAW264.7 cell lysate; lane 7: mouse NIH 3T3 cell lysate. A specific immunoreactive band is detected at approximately 57 kDa in all tested samples, consistent with the predicted molecular weight of IRF5. These results demonstrate that this IRF5 Antibody is suitable for Western blot detection of Interferon Regulatory Factor 5 across human, rat, and mouse cell lines.



Interferon Regulatory Factor 5 Antibody SH-SY5Y Cell FACS. Flow cytometric analysis was performed on fixed and permeabilized human SH-SY5Y cells using Interferon Regulatory Factor 5 Antibody at 1 ug/10^6 cells following blocking with normal goat serum. The red histogram represents unstained cells, the green histogram represents the isotype control, and the blue histogram represents cells stained with the Interferon Regulatory Factor 5 antibody. A clear rightward shift of the antibody-stained population relative to both control populations demonstrates specific intracellular binding and confirms IRF5 expression in SH-SY5Y cells. These results demonstrate that this IRF5 Antibody is suitable for flow cytometric detection of Interferon Regulatory Factor 5.

Description

Interferon Regulatory Factor 5 Antibody recognizes IRF5, a member of the interferon regulatory factor family that functions as a transcription factor controlling innate immune and inflammatory gene expression. Encoded by the IRF5 gene, this protein is activated downstream of Toll-like receptor signaling and translocates to the nucleus where it regulates transcription of type one interferons and numerous proinflammatory cytokines. Because IRF5 occupies a central position in host defense and immune activation, Interferon Regulatory Factor 5 Antibody is widely used to investigate mechanisms of antiviral immunity and inflammatory signaling. NSJ Bioreagents provides this antibody to support reliable detection of IRF5 in diverse research applications.

IRF5 is expressed in multiple immune cell populations, including macrophages, dendritic cells, B lymphocytes, and monocytes, where it contributes to cytokine production and innate immune activation. Following stimulation by pathogen-associated molecular patterns, IRF5 promotes expression of genes involved in antimicrobial defense while also influencing macrophage polarization toward a proinflammatory phenotype. These activities make IRF5 an important regulator of immune responses to viral and bacterial infection as well as sterile inflammation. Researchers frequently employ Interferon Regulatory Factor 5 Antibody to examine IRF5 expression, localization, and activation in studies of innate immunity.

Beyond infectious disease, dysregulated IRF5 signaling has been linked to autoimmune disorders including systemic lupus erythematosus, rheumatoid arthritis, inflammatory bowel disease, and additional chronic inflammatory conditions. Variants within the IRF5 gene influence susceptibility to several immune-mediated diseases, making IRF5 an attractive biomarker and therapeutic target. IRF5 is also investigated in cancer biology, where inflammatory signaling within the tumor microenvironment can influence disease progression and responses to therapy. Consequently, Interferon Regulatory Factor 5 Antibody is valuable for studies spanning immunology, inflammation, oncology, and translational research.

Interferon Regulatory Factor 5 Antibody enables sensitive detection of IRF5 in studies of innate immunity, interferon signaling, and inflammatory transcriptional regulation. Whether investigating cytokine production, Toll-like receptor signaling, macrophage activation, or autoimmune disease mechanisms, this antibody provides a dependable reagent for analyzing IRF5 expression and cellular localization.

For a broader overview of IRF5 biology and additional validated products, visit our IRF5 Antibody / Innate Immune Transcription Factor Antibody page.

Application Notes

Optimal dilution of the Interferon Regulatory Factor 5 Antibody / IRF5 Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids R98-A477) was used as the immunogen for the Interferon Regulatory Factor 5 antibody.

Storage

After reconstitution, the Interferon Regulatory Factor 5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

IRF5 antibody, IRF-5 antibody, Innate Immune Transcription Factor antibody, Interferon Response Factor 5 antibody, Virus Activated Transcription Factor antibody, Interferon Regulatory Protein 5 antibody

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