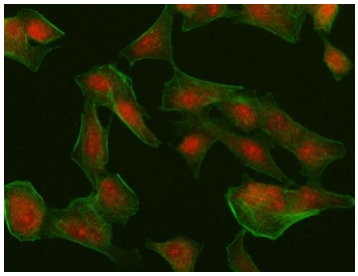
Interferon Regulatory Factor 4 Antibody / IRF4 Polyclonal Antibody (RQ8689)

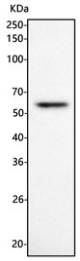
Catalog No.	Formulation	Size
RQ8689	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 days
Species Reactivity	Human
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	Q15306
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This Interferon Regulatory Factor 4 Antibody / IRF4 Polyclonal Antibody is available for research use only.



Interferon Regulatory Factor 4 Antibody Detection in Human A549 Lung Cancer Cells by IF. Immunofluorescence staining of FFPE human A549 lung cancer cells with Interferon Regulatory Factor 4 Antibody shows red IRF4-associated fluorescence concentrated predominantly within the nuclear and perinuclear regions, while Phalloidin-iFluor 488 highlights the actin cytoskeleton in green. Heat-induced epitope retrieval was performed by steaming the sample in pH 6 citrate buffer for 20 min. The concentrated intracellular red signal is consistent with the nuclear localization of this transcription factor and demonstrates cellular detection of IRF4 using this IRF4 Polyclonal Antibody.



Interferon Regulatory Factor 4 Antibody Detection in Human Hut-78 T Cells by WB. Western blot testing of human Hut-78 T-cell lysate with Interferon Regulatory Factor 4 Antibody shows a strong, discrete band migrating just above the 50 kDa molecular weight marker, closely corresponding to the predicted molecular weight of approximately 51 kDa for human IRF4. Little additional reactivity is visible across the displayed molecular weight range, producing a clean target-region signal. The well-defined band demonstrates detection of endogenous IRF4 in human Hut-78 cells using this IRF4 Polyclonal Antibody.

Description

Interferon Regulatory Factor 4 Antibody recognizes IRF4, a transcription factor that plays important roles in immune cell development, differentiation, and function. IRF4 is also known as multiple myeloma oncogene 1 (MUM1) and belongs to the interferon regulatory factor family of DNA-binding proteins. Unlike several IRF family members that are broadly associated with interferon responses, IRF4 is expressed predominantly in cells of the immune system and participates in transcriptional programs that regulate lymphoid and myeloid cell biology.

IRF4 has particularly important functions during B-cell differentiation and the development of antibody-secreting plasma cells. Changes in IRF4 abundance help regulate distinct transcriptional programs as B cells progress through activation and differentiation. IRF4 also contributes to the development and function of multiple T-cell subsets and participates in the biology of macrophages and dendritic cells. Through these activities, IRF4 connects transcriptional regulation with adaptive immunity, antibody production, inflammatory responses, and immune cell homeostasis.

Dysregulated IRF4 expression and signaling are investigated extensively in hematologic malignancies. The alternative designation MUM1 reflects the association of IRF4 with multiple myeloma, in which IRF4-dependent transcriptional programs can support plasma cell identity and survival. Altered IRF4 activity is also studied in lymphoid malignancies and leukemia. Beyond hematopoietic biology, IRF4 participates in melanocyte pigmentation programs through regulatory interactions involving MITF, illustrating the diverse transcriptional functions associated with this protein.

This IRF4 Polyclonal Antibody is a rabbit polyclonal generated against recombinant human IRF4 corresponding to amino acids 163-419. The antibody provides a polyclonal reagent for investigating expression of this immune regulatory transcription factor and complements monoclonal reagents directed against IRF4. NSJ Bioreagents supplies this antibody for research use only.

An Interferon Regulatory Factor 4 Antibody can be used to investigate IRF4 expression, immune cell differentiation, B-cell and plasma cell biology, transcriptional regulation, multiple myeloma, lymphoid malignancies, and immune system function.

For a recombinant monoclonal antibody with broader tissue validation, see our IRF4 Antibody RM352 / Interferon Regulatory Factor 4 Monoclonal Antibody page.

Application Notes

Optimal dilution of the Interferon Regulatory Factor 4 Antibody / IRF4 Polyclonal Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids A163-Q419) was used as the immunogen for the Interferon Regulatory Factor 4 Antibody.

Storage

After reconstitution, the Interferon Regulatory Factor 4 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

IRF4 antibody, MUM1 antibody, multiple myeloma oncogene 1 antibody, LSIRF antibody, PIP antibody, ICSAT antibody

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