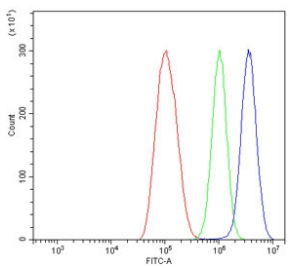
Interferon Regulatory Factor 7 Antibody / IRF7 Antibody (RQ6717)

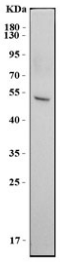
Catalog No.	Formulation	Size
RQ6717	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q92985
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Interferon Regulatory Factor 7 Antibody / IRF7 Antibody is available for research use only.



Interferon Regulatory Factor 7 Antibody Human ThP-1 Cell FACS. Flow cytometry analysis of human ThP-1 cells using IRF7 Antibody demonstrates a distinct rightward shift of the positive cell population (blue) relative to the isotype control (green) and unstained cells (red), consistent with specific detection of Interferon Regulatory Factor 7 (IRF7). IRF7 is a transcription factor that serves as a master regulator of type I interferon production and antiviral immune signaling pathways. The observed staining profile supports expression of IRF7 in ThP-1 monocytic cells and is consistent with its established role in innate immunity, inflammatory signaling, and host defense responses. Cells were stained using 1 Âµg antibody per million cells following blocking with goat serum. Red = cells alone; Green = isotype control; Blue = IRF7 antibody.



Interferon Regulatory Factor 7 Antibody Human HEK293 Cell WB. Western blot analysis of human HEK293 cell lysate using Interferon Regulatory Factor 7 Antibody / IRF7 Antibody demonstrates a prominent immunoreactive band at approximately 50-55 kDa, consistent with the predicted molecular weight of Interferon Regulatory Factor 7 (IRF7). IRF7 is a transcription factor that serves as a master regulator of type I interferon production and antiviral immune responses. The observed migration pattern is consistent with expression of IRF7 in HEK293 cells and may vary depending on phosphorylation status and other post-translational modifications associated with activation of interferon signaling pathways.

Description

Interferon Regulatory Factor 7 Antibody / IRF7 Antibody recognizes Interferon Regulatory Factor 7 (IRF7), a member of the interferon regulatory factor family of transcription factors that plays an essential role in innate immune signaling and antiviral defense. IRF7 functions as a transcriptional regulator that coordinates expression of type I interferons and interferon-stimulated genes following activation by pathogen recognition pathways. Through its ability to amplify interferon responses, IRF7 contributes to host protection against viral infection and serves as a critical component of vertebrate immune defense mechanisms.

IRF7 is activated downstream of multiple pathogen-sensing pathways, including receptors that detect viral RNA and DNA. Following activation, IRF7 translocates to the nucleus where it promotes transcription of genes involved in antiviral immunity, cytokine production, and immune communication. Because of its central role in interferon biology, IRF7 has become one of the most extensively studied transcription factors involved in antiviral signaling networks.

The biological activities of IRF7 extend beyond viral defense. IRF7 participates in regulation of inflammatory responses, immune cell activation, cytokine signaling, and cellular adaptation to stress. Appropriate control of IRF7 activity is important for balancing protective immune responses with prevention of excessive inflammation. Altered IRF7 signaling has been implicated in infectious diseases, inflammatory disorders, and immune dysregulation, making the protein a valuable target for biomedical research.

Researchers frequently examine IRF7 expression and activation status when investigating innate immunity, interferon signaling, vaccine responses, and host-pathogen interactions. Because IRF7 occupies a pivotal position within antiviral defense pathways, it is commonly used as a molecular marker of interferon pathway activation and immune responsiveness. Studies of IRF7 continue to provide important insight into the mechanisms that coordinate vertebrate immune defense systems.

At NSJ Bioreagents, we provide highly validated antibodies for immunology, infectious disease research, and molecular signaling studies. Interferon Regulatory Factor 7 Antibody / IRF7 Antibody is useful for investigating antiviral immunity, interferon signaling pathways, innate immune activation, and inflammatory responses. Ongoing research continues to expand our understanding of the molecular functions of IRF7 and its role in regulating host defense mechanisms.

Learn more about antibodies targeting this key antiviral signaling regulator on our IRF7 Antibody / Antiviral Response Protein Antibody page.

Application Notes

Optimal dilution of the Interferon Regulatory Factor 7 Antibody / IRF7 Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids E82-A419) was used as the immunogen for the Interferon Regulatory Factor 7 / IRF7 antibody.

Storage

After reconstitution, the Interferon Regulatory Factor 7 / IRF7 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

IRF7 Antibody, IRF-7 Antibody, Interferon Signaling Factor Antibody, Type I Interferon Regulatory Factor Antibody, Antiviral Response Transcription Factor Antibody, Innate Immune Signaling Protein Antibody

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