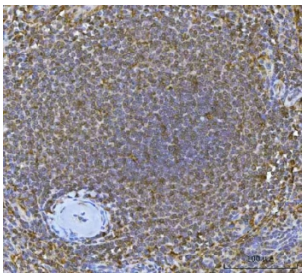
IRF7 Antibody / Antiviral Response Protein Antibody (RQ7267)

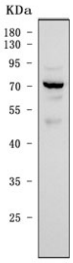
Catalog No.	Formulation	Size
RQ7267	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

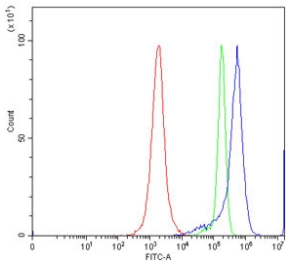
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q92985
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This IRF7 Antibody / Antiviral Response Protein Antibody is available for research use only.



IRF7 Antibody Human Spleen IHC. Immunohistochemistry staining of FFPE human spleen tissue using IRF7 Antibody / Antiviral Response Protein Antibody demonstrates widespread nuclear and cytoplasmic HRP-DAB brown staining throughout splenic lymphoid cell populations. Strong immunoreactivity is observed within cells populating the white pulp, consistent with expression of Interferon Regulatory Factor 7 (IRF7), a transcription factor that serves as a master regulator of type I interferon production and antiviral immune responses. The staining pattern aligns with the established role of IRF7 in innate immune activation, host defense signaling, and regulation of interferon-dependent gene expression within lymphoid tissues. HIER: boil tissue sections in pH 8 EDTA for 20 minutes and allow to cool before testing.



IRF7 Antibody Human 293T Cell WB. Western blot analysis of human 293T cell lysate using IRF7 Antibody / Antiviral Response Protein Antibody demonstrates a prominent immunoreactive band at approximately 65-70 kDa. The observed molecular weight is higher than the predicted size of Interferon Regulatory Factor 7 (IRF7) (~54 kDa), which is consistent with phosphorylation and other post-translational modifications known to regulate IRF7 activation, dimerization, and nuclear translocation during antiviral signaling. IRF7 functions as a master regulator of type I interferon production and innate immune responses, controlling expression of genes involved in host defense against viral infection. The strong band observed in 293T cells is consistent with expression of IRF7 and its modified forms associated with immune signaling pathways.



IRF7 Antibody Human JK Cell FACS. Flow cytometry analysis of human JK cells using IRF7 Antibody / Antiviral Response Protein Antibody demonstrates a clear 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 functions as a master regulator of type I interferon production and antiviral immune responses. The observed staining profile supports expression of IRF7 in JK cells and is consistent with its established role in innate immune signaling, interferon pathway activation, and host defense mechanisms. Cells were stained using 1 Âµg antibody per million cells following blocking with goat serum. Red = cells alone; Green = isotype control; Blue = IRF7 antibody.

Description

IRF7 Antibody / Antiviral Response Protein Antibody recognizes Interferon Regulatory Factor 7 (IRF7), a transcription factor that serves as a master regulator of antiviral immunity and type I interferon production. IRF7 functions downstream of pattern recognition receptor signaling pathways that detect viral nucleic acids and other pathogen-associated molecular patterns. Upon activation, IRF7 undergoes phosphorylation and nuclear translocation, where it initiates transcription of interferons and interferon-stimulated genes that establish a protective antiviral state. Through this central role in innate immune signaling, IRF7 helps coordinate the earliest stages of host defense against viral infection.

Type I interferon responses represent one of the most important mechanisms by which vertebrate cells recognize and respond to viral pathogens. IRF7 is widely regarded as a key regulator of these pathways, controlling expression of genes involved in antiviral defense, immune activation, and inflammatory signaling. Activation of IRF7 promotes production of interferons that function in both autocrine and paracrine manners to limit viral replication and enhance immune communication. Consequently, IRF7 is frequently studied in virology, immunology, vaccine research, and host-pathogen interaction studies.

In addition to its role in antiviral defense, IRF7 participates in broader immune regulatory networks that influence cytokine production, inflammatory responses, and cellular adaptation to environmental stress. Tight regulation of IRF7 activity is required to maintain effective immunity while preventing excessive inflammatory signaling. Dysregulation of IRF7-dependent pathways has been associated with altered susceptibility to infection, chronic inflammation, autoimmune disease, and immune dysfunction. As a result, IRF7 remains an important target in studies examining innate immunity and disease-associated signaling mechanisms.

IRF7 activity is controlled through a series of phosphorylation-dependent activation events that facilitate dimerization and nuclear localization. These mechanisms allow cells to rapidly respond to viral infection and coordinate expression of numerous downstream immune effector molecules. Because IRF7 occupies a central position within interferon signaling networks, it is commonly used as a marker of antiviral pathway activation and innate immune responsiveness.

At NSJ Bioreagents, we provide highly validated antibodies for immunology, infectious disease research, and cell signaling studies. IRF7 Antibody / Antiviral Response Protein Antibody is useful for investigating innate immune signaling, host defense mechanisms, interferon pathway activation, and antiviral responses. Continued study of IRF7 is advancing

our understanding of the molecular pathways that regulate immunity, inflammation, and protection against infectious disease.

Explore additional antibodies involved in innate immunity, host defense, and inflammatory signaling on our Immunology Antibodies page.

Application Notes

Optimal dilution of the IRF7 Antibody / Antiviral Response Protein Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Y27-A503) was used as the immunogen for the IRF7 / Interferon regulatory factor 7 antibody.

Storage

After reconstitution, the IRF7 / Interferon regulatory factor 7 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

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

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