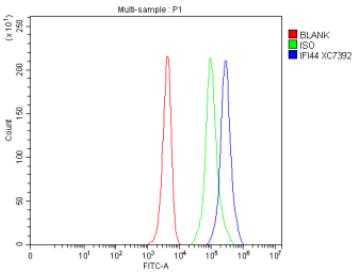
IFI44 Antibody / Interferon induced protein 44 (FY12304)

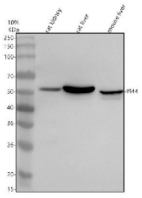
Catalog No.	Formulation	Size
FY12304	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q8BV66
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This IFI44 antibody is available for research use only.



Flow Cytometry analysis of mouse Hepa1-6 cells using anti-IFI44 antibody. Overlay histogram showing Hepa1-6 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IFI44 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of IFI44 using anti-IFI44 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: rat kidney tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IFI44 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. The expected molecular weight of IFI44 is ~50 kDa.

Description

IFI44 antibody detects Interferon-induced protein 44, encoded by the IFI44 gene on chromosome 1p31.1. IFI44 antibody is commonly used in immunology, antiviral, and autoimmune disease research. IFI44 is an interferon-stimulated gene product induced by type I interferons and viral infection. It contributes to the host antiviral defense response and is a biomarker of interferon pathway activation.

Structurally, IFI44 is a ~50 kDa protein with coiled-coil domains but lacks known catalytic motifs. It localizes predominantly to the cytoplasm, with potential mitochondrial and cytoskeletal associations. Its structure suggests a role as a scaffold or regulator rather than an enzyme.

Functionally, IFI44 is strongly induced by viral infections including influenza, hepatitis C virus, and SARS-CoV. It enhances innate immune responses, possibly by modulating cytoskeletal dynamics or mitochondrial function. Researchers use IFI44 antibody to study interferon responses, viral pathogenesis, and autoimmune disease mechanisms.

Clinically, IFI44 is elevated in autoimmune diseases such as systemic lupus erythematosus and dermatomyositis, where interferon signatures correlate with disease severity. It has been proposed as a diagnostic biomarker for interferon-driven conditions. IFI44 polymorphisms may also influence susceptibility to viral infections. NSJ Bioreagents provides IFI44 antibody to support immunology and infectious disease research.

Experimentally, IFI44 antibody is used in western blotting to detect the ~50 kDa protein, in immunohistochemistry to assess tissue expression, and in immunofluorescence to study cytoplasmic distribution. Transcriptomic studies often pair IFI44 expression with IFI44L to define interferon response signatures, and IFI44 antibody provides the protein-level validation.

Application Notes

Optimal dilution of the IFI44 antibody should be determined by the researcher.

Immunogen

E.coli-derived mouse IFI44 recombinant protein (Position: M1-H370) was used as the immunogen for the IFI44 antibody.

Storage

After reconstitution, the IFI44 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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