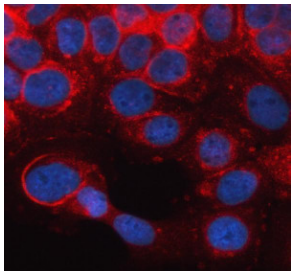
GBP2 Antibody / Interferon Induced GTPase Antibody (FY13491)

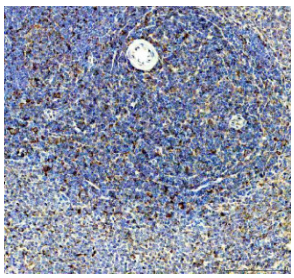
Catalog No.	Formulation	Size
FY13491	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

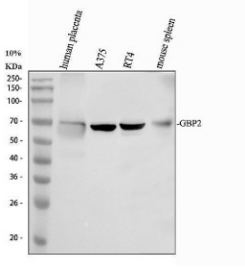
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P32456
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml
Limitations	This GBP2 Antibody / Interferon Induced GTPase Antibody is available for research use only.



GBP2 Antibody Human A431 IF. Immunofluorescent staining of A431 human epidermoid carcinoma cells using GBP2 Antibody (red) following enzyme-mediated antigen retrieval and DAPI nuclear counterstaining (blue). GBP2 displays predominantly cytoplasmic staining with a punctate distribution, consistent with its localization as an interferon-inducible large GTPase involved in innate immune signaling and host defense. This result demonstrates the utility of GBP2 Antibody, an Interferon Induced GTPase Antibody, for investigating GBP2 localization and interferon-mediated immune responses in cultured human cells.



GBP2 Antibody Rat Spleen IHC. Immunohistochemical staining of FFPE rat spleen tissue using GBP2 Antibody at 2 ug/ml with HRP/DAB detection following heat-induced epitope retrieval in pH8 EDTA buffer. Distinct cytoplasmic staining is observed in splenic immune cells, consistent with the expected expression of the interferon-inducible GTPase GBP2 in lymphoid tissue. This staining pattern demonstrates the utility of GBP2 Antibody, an Interferon Induced GTPase Antibody, for investigating innate immune responses, interferon signaling and immune cell activation in tissue sections.



GBP2 Antibody Human and Mouse WB. Western blot analysis of GBP2 Antibody using lysates from lane 1: human placenta tissue, lane 2: human A375 cells, lane 3: human RT4 cells and lane 4: mouse spleen tissue. A specific band is detected at approximately 67-70 kDa in all samples, consistent with the predicted molecular weight of endogenous GBP2. These results demonstrate cross-species detection of GBP2 and support the use of GBP2 Antibody, an Interferon Induced GTPase Antibody, for studies of innate immunity, interferon signaling and host defense mechanisms.

Description

GBP2 Antibody / Interferon Induced GTPase Antibody recognizes guanylate binding protein 2 (GBP2), a member of the large GTPase family induced by interferons during innate immune activation. GBP2 is rapidly upregulated in response to type I and type II interferons, where it contributes to host defense by regulating antimicrobial and antiviral immune responses. As an interferon-responsive GTPase, GBP2 participates in pathogen restriction, inflammatory signaling and immune cell activation, making it an important target for immunology, infectious disease and cancer research. NSJ Bioreagents offers high-quality GBP2 Antibody reagents for investigating interferon-mediated signaling pathways and innate immunity.

GBP2 hydrolyzes guanosine triphosphate and associates with intracellular membranes, pathogen-containing vacuoles and signaling complexes following immune stimulation. It cooperates with other guanylate binding proteins and interferon-induced proteins to restrict the replication of intracellular bacteria, parasites and viruses while promoting activation of inflammasome pathways and antimicrobial defense mechanisms. Through these activities, GBP2 helps coordinate cell-autonomous immunity and contributes to the early innate immune response against invading pathogens. Consequently, GBP2 Antibody is widely used to study interferon signaling, host-pathogen interactions and inflammatory regulation.

Beyond infectious disease, GBP2 has emerged as a biomarker of immune activation within the tumor microenvironment. Elevated GBP2 expression has been associated with interferon signaling signatures, immune cell infiltration and responses to immunotherapy in several cancer types. In addition, GBP2 has been investigated in autoimmune disorders and chronic inflammatory diseases in which sustained interferon signaling contributes to disease pathogenesis. These diverse biological functions have established GBP2 as an important regulator linking innate immunity with inflammation and cancer biology.

An GBP2 Antibody is a valuable reagent for investigating interferon signaling, antimicrobial defense and innate immune regulation. An Interferon Induced GTPase Antibody supports research involving host-pathogen interactions, inflammatory signaling, antiviral immunity, tumor immunology and immune-mediated disease.

Researchers studying innate immunity, inflammatory signaling and host defense may also be interested in our Innate Immune Antibodies page, featuring antibodies against key regulators of antimicrobial and interferon-mediated immune responses.

Application Notes

Optimal dilution of the GBP2 Antibody / Interferon Induced GTPase Antibody should be determined by the researcher.

Immunogen

E.coli-derived human Guanylate binding protein 2 recombinant protein (amino acids G132-L480) was used as the immunogen for the GBP2 Antibody.

Storage

After reconstitution, the GBP2 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

GBP2 antibody, Interferon Induced GTPase antibody, Guanylate Binding Protein 2 antibody, Guanylate-Binding Protein 2 antibody

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