

Mouse anti-Mouse, Rat IRF3 Monoclonal Antibody | anti-Irf3 antibody

Anti-IRF3 Antibody (monoclonal, 7B10)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125902	Mouse	Mouse, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

IRF3; Monoclonal Antibody; Anti-IRF3 Antibody (monoclonal; 7B10); Interferon regulatory factor 3; IRF-3; Irf3; interferon regulatory factor 3; anti-Irf3 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	7B10
Specificity	Mouse IgG monoclonal antibody for IRF3 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-Irf3 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse IRF3 recombinant protein (Position: M1-I419).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HEPA1-6 cells using anti-IRF3 antibody (AAA125902). Overlay histogram showing HEPA1-6 cells stained with AAA125902 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-IRF3 Antibody (AAA125902, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2 IF analysis of IRF3 using anti-IRF3 antibody (AAA125902). IRF3 was detected in immunocytochemical section of RM-1 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL mouse anti-IRF3 Antibody (AAA125902) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of IRF3 using anti-IRF3 antibody (AAA125902). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: rat brain tissue lysates Lane 2: mouse lung tissue lysates Lane 3: mouse brain tissue lysates Lane 4: mouse NIH/3T3 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-IRF3 antigen affinity purified monoclonal antibody (Catalog # AAA125902) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IRF3 at approximately 50-55KD. The expected band size for IRF3 is at 50-55KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Irf3 antibody	IRF3(interferon regulatory factor 3) is a member of the interferon regulatory transcription factor (IRF) family. The IRF3 gene is mapped on 19q13.33. IRF3 is found in an inactive cytoplasmic form that upon serine/threonine phosphorylation forms a complex with CREBBP. IRF3 plays an important role in the innate immune system's response to viral infection. Aggregated MAVS have been found to activate IRF3 dimerization. Although IRF3 increased transcriptional activity from an ISRE-containing promoter, expression of IRF3 as a Gal4 fusion protein did not activate expression of a chloramphenicol acetyltransferase (CAT) reporter gene containing repeats of the Gal4-binding sites. Translocation of IRF3 was accompanied by an increase in serine and threonine phosphorylation. The transcriptional activators CREBBP and EP300 coimmunoprecipitated with IRF3 only subsequent to viral infection, and the authors stated that these are also subunits of DRAF1.
References	1. Bellingham, J., Gregory-Evans, K., Gregory-Evans, C. Y. Mapping of human interferon regulatory factor 3 (IRF3) to chromosome 19q13.3-13.4 by an intragenic polymorphic marker. Ann. Hum. Genet. 62: 231-234, 1998. 2. Doyle, S. E., Vaidya, S. A., O'Connell, R., Dadgostar, H., Dempsey, P. W., Wu, T. -T., Rao, G., Sun, R., Haberland, M. E., Modlin, R. L., Cheng, G. IRF3 mediates a TLR3/TLR4-specific antiviral gene program. Immunity 17: 251-263, 2002. 3. Stetson, D. B., Medzhitov, R. Recognition of cytosolic DNA activates an IRF3-dependent innate immune response. Immunity 24: 93-103, 2006.

NCBI AND UNIPROT INFORMATION

NCBI GI #	8393627
NCBI GeneID	54131
NCBI Accession #	NP_058545.1
NCBI GenBank Nucleotide #	NM_016849.4
UniProt Accession #	P70671
Molecular Weight	46,852 Da
NCBI Official Full Name	interferon regulatory factor 3
NCBI Official Synonym Full Names	interferon regulatory factor 3
NCBI Official Symbol	Irf3
NCBI Official Synonym Symbols	IRF-3; C920001K05Rik
NCBI Protein Information	interferon regulatory factor 3
UniProt Protein Name	Interferon regulatory factor 3
UniProt Gene Name	Irf3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/irf3-antibody-clone-7b10-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125902>