abcam

ab208271

Alexa Fluor® 488 Anti-IRF5 antibody [EPR17067]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17067
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse

Dilution info	1/100
Notes	This product gave a positive signal in Raw264.7 cells fixed with 4% formaldehyde (10 min)

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information IRF5

Function	Transcription factor that plays a critical role in innate immunity by activating expression of type I interferon (IFN) IFNA and INFB and inflammatory cytokines downstream of endolysosomal toll-like receptors TLR7, TLR8 and TLR9 (PubMed:11303025, PubMed:15695821, PubMed:22412986, PubMed:25326418, PubMed:32433612). Regulates the transcription of type I IFN genes (IFN-alpha and IFN-beta) and IFN-stimulated genes (ISG) by binding to an interferon-stimulated response element (ISRE) in their promoters (By similarity). Can efficiently activate both the IFN-beta (IFNB) and the IFN-alpha (IFNA) genes and mediate their induction downstream of the TLR-activated, MyD88-dependent pathway (By similarity). Key transcription factor regulating the IFN response during SARS-CoV-2 infection (PubMed:33440148).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	IRF5 or Interferon Regulatory Factor 5 is a member of the IRF family of transcription factors. This protein weighs approximately 56 kDa and is expressed in cells of the immune system including B cells dendritic cells and macrophages. IRF5 plays an important role in regulating the transcription of interferon-stimulated genes following a viral infection. It acts by binding to specific DNA sequences initiating transcription processes that are important for the antiviral response.

Biological function summary	IRF5 influences the immune response through the regulation of cytokine production. It activates genes involved in producing pro-inflammatory cytokines such as TNF-α and IL-6 which are important for clearing viral infections and activating immune cells. IRF5 does not usually form part of a protein complex but it interacts closely with TRAF6 and MyD88 for its activation. Its pivotal role in cytokine production highlights its importance in controlling inflammation.
Pathways	IRF5 is an important component of the Toll-like receptor (TLR) signaling pathway and plays a role in the MyD88-dependent pathway. In this context IRF5 gets activated by TLRs interacting with MyD88 and TAK1 to enhance the transcription of important genes for immune response. It is also closely connected to the IRF3 protein which shares similar activation pathways and can similarly initiate an antiviral state.
Associated diseases and disorders	Defects or dysregulation in IRF5 function are linked to autoimmune diseases such as systemic lupus erythematosus (SLE) and rheumatoid arthritis. In SLE IRF5 influences autoantibody production contributing to disease development. It works alongside other regulatory proteins involved in autoimmunity including IFN-α and STAT4 which also play significant roles in modulating immune responses. Understanding IRF5's role in these conditions could present new opportunities for therapeutic interventions using IRF5 inhibitors.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

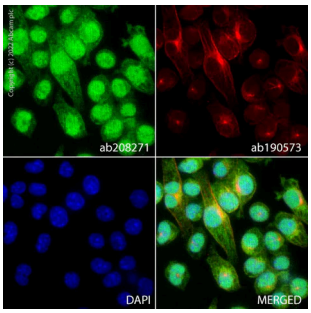
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-IRF5 antibody [EPR17067] (ab208271)

IRF5 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IRF5 antibody

ab208271 staining IRF5 in RAW264.7 cells. The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab208271 at 1/100 dilution (shown in green) and ab190573, Rabbit monoclonal to alpha Tubulin (Alexa Fluor® 647), at 1/1000 dilution (**pseudocolored in red**). Nuclear DNA was labelled with DAPI (shown in blue).
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

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