abcam

ab251131

Anti-Interferon alpha 6 antibody [EPR16355] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR16355
Concentration	1.011 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information IFNA6

Function	Produced by macrophages, IFN-alpha have antiviral activities. Interferon stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab251131 is the carrier-free version of ab192264.

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.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	Interferon alpha 6 also known as IFN-α6 is part of the Type I interferons. This protein is found in humans and has an approximate mass of 19.5 kDa. It belongs to the larger interferon family which includes various alpha beta and omega subtypes. IFN-α6 is mainly expressed in leukocytes including B cells T cells and dendritic cells. In terms of structure IFN-α6 is a member of the cytokine receptor family sharing similarities with other members like IFN-α2 but differing slightly in sequences.
Biological function summary	Interferon alpha 6 contributes to the body's immune responses against viral infections and tumors. It attracts immune cells to infected sites and enhances the antigen presentation process. It interacts with the interferon alpha/beta receptor (IFNAR) initiating a signaling cascade that involves JAK-STAT pathways. This activation leads to the expression of antiviral proteins and boosts the immune system's ability to clear pathogens. IFN-α6 forms part of the larger interferon complex working in coordination with other IFN-α subfamily members to amplify immune responses.
Pathways	Interferon alpha 6 plays an important role in both the JAK-STAT signaling pathway and the antiviral immune response pathway. JAK-STAT involves kinase proteins such as JAK1 and TYK2 which become activated upon IFN-α6 binding to its receptor. This activation enables the transcription of interferon-stimulated genes (ISGs) that inhibit viral replication. Similarly in the immune response pathway it enhances the expression of major histocompatibility complex (MHC) molecules aiding in the identification of infected cells by T cells. IFN-α6 shares these

	pathways with other interferons like IFN-α2 and IFN-β which also influence similar immune processes.
Associated diseases and disorders	Interferon alpha 6 has been linked to interferonopathies and certain types of cancers like melanoma. Dysregulation of IFN-α6 can contribute to exaggerated inflammatory responses leading to conditions such as systemic lupus erythematosus (SLE). In these disorders an abnormal increase in interferons can cause chronic inflammation. Additionally in cancers it may hinder the evasion mechanisms of tumor cells promoting tumor suppression. Through its interaction with proteins in these diseases including IFNAR JAK1 and TYK2 IFN-α6 remains an important focus for research in therapeutic interventions.

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

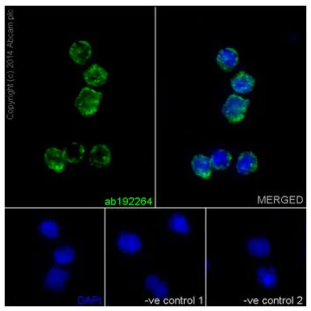
We do not recommend this combination. It is not covered by our product promise.

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.

Full details and terms and conditions can be found here:
Terms & Conditions.

3 product images

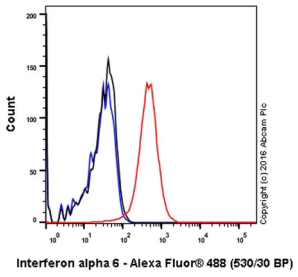


Immunocytochemistry/ Immunofluorescence - Anti-Interferon alpha 6 antibody [EPR16355] - BSA and Azide free (ab251131)

Interferon alpha 6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Interferon alpha 6 antibody

This data was developed using ab192264, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed Jurkat cells labeling Interferon alpha 6 with ab192264 at 1/50 dilution. The cells were permeabilised with 0.1% Triton X-100. Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/200 dilution was used as the secondary antibody (green). The nuclear counter stain is DAPI (blue).

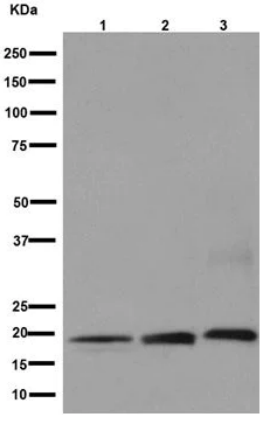
The negative controls are as follows;
1. Anti-Interferon alpha 6 at 1/50 dilution followed by Goat anti mouse IgG (Alexa Fluor®594) at 1/500 dilution.
2. Anti-Interferon alpha 6 at 1/50 dilution followed by Goat anti mouse IgG (Alexa Fluor®594) at 1/500 dilution.



Flow Cytometry (Intracellular) - Anti-Interferon alpha 6 antibody [EPR16355] - BSA and Azide free (ab251131)

Interferon alpha 6 Flow Cytometry (Intracellular) staining using rabbit Anti-Interferon alpha 6 antibody

This data was developed using ab192264, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of Jurkat cells labelling Interferon alpha 6 (red) with purified ab192264 at dilution of 1/600. The secondary antibody used was Alexa Fluor® 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody used was Rabbit Monoclonal IgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.



Western blot - Anti-Interferon alpha 6 antibody [EPR16355] - BSA and Azide free (ab251131)

Interferon alpha 6 Western blot staining using rabbit Anti-Interferon alpha 6 antibody

This data was developed using ab192264, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Interferon alpha 6 antibody [EPR16355] (ab192264) at 1/5000 dilution

Lane 1:
U937 (Human histiocytic lymphoma cell line) cell lysate at 20 µg

Lane 2:
Human fetal liver tissue lysate at 20 µg

Lane 3:
Human fetal lung tissue lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 22 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.