abcam

Product datasheet

# Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free ab240559

Recombinant RabMAb

4 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free |
| **Description** | Rabbit monoclonal [EPR22171] to IFN gamma Receptor beta/AF-1 - BSA and Azide free |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** ELISA, ICC/IF, Flow Cyt |
| **Species reactivity** | **Reacts with:** Human, Recombinant fragment |
| **Immunogen** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | ICC/IF: HEK-293T cells transfected with a Myc-tagged IFN gamma Receptor beta/AF-1 expression construct. |
| **General notes** | ab240559 is the carrier-free version of **ab224197**.<br><br>Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.<br><br>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.<br><br>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.<br><br>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.<br><br>This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br><br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## Properties

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| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **Storage buffer** | pH: 7.2<br>Constituent: PBS |
| **Carrier free** | Yes |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR22171 |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab240559 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **ELISA** | | Use at an assay dependent concentration. |
| **ICC/IF** | | Use at an assay dependent concentration. |
| **Flow Cyt** | | Use at an assay dependent concentration. |

## Target

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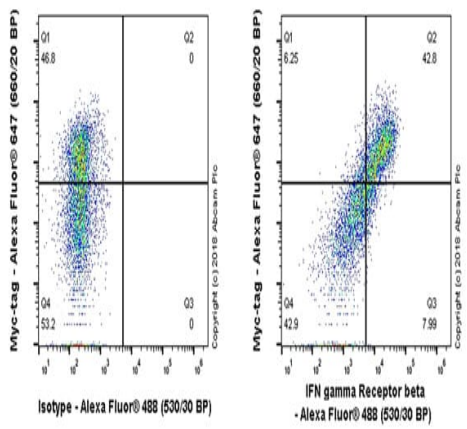
|---|---|
| **Function** | Part of the receptor for interferon gamma. Required for signal transduction. This accessory factor is an integral part of the IFN-gamma signal transduction pathway and is likely to interact with GAF, JAK1, and/or JAK2. |
| **Involvement in disease** | Defects in IFNGR2 are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity, whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas others develop, later in life, disseminated but curable infections with tuberculoid granulomas. MSMD is a genetically heterogeneous disease with autosomal recessive, autosomal dominant or X-linked inheritance. |
| **Sequence similarities** | Belongs to the type II cytokine receptor family.<br>Contains 2 fibronectin type-III domains. |
| **Cellular localization** | Membrane. |

## Images




Flow Cytometry - Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free (ab240559)

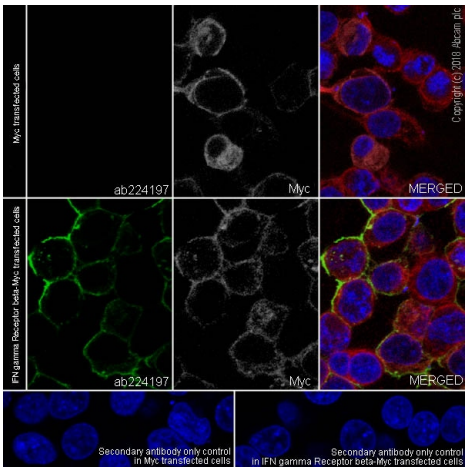
Flow cytometric analysis of HEK-293T (human embryonic kidney epithelial cell) transfected with a Myc-tagged IFN gamma Receptor beta/AF-1 expression construct cell line labeling IFN gamma Receptor beta/AF-1 with **ab224197** at 1/400 dilution.

Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody.

Cells were surface stained with isotype control Rabbit monoclonal IgG (**ab172730**) (Left panel) or IFN gamma receptor beta/AF-1 (Right panel), then co-stained with Alexa Fluor® 647 conjugated-Myc-tag antibody.

Gated on viable cells.

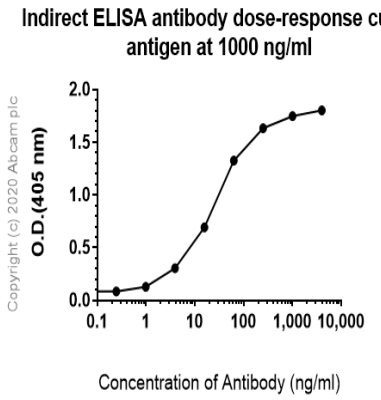
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab224197**).




Immunocytochemistry/ Immunofluorescence - Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free (ab240559)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) cells transfected with a Myc-tagged IFN gamma Receptor beta/AF-1 expression construct labeling IFN gamma Receptor beta/AF-1 with **ab224197** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing positive staining in HEK-293T cells transfected with a Myc-tagged IFN gamma Receptor beta/AF-1 expression construct. The nuclear counterstain is DAPI (blue).
Counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at a 1/200 dilution (red) and Myc-Tag (9B11) Mouse mAb (Alexa Fluor® 647 Conjugate) (white).
The negative control is the secondary antibody only.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (**ab224197**).




ELISA - Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free (ab240559)

This data was developed using **ab224197**, the same antibody clone in a different buffer formulation.

ELISA analysis of Human IFNGR2 recombinant protein at 1000 ng/mL with **ab224197**. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.


Anti-IFN gamma Receptor beta/AF-1 antibody [EPR22171] - BSA and Azide free (ab240559)



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