abcam

Product datasheet

Anti-IFNGR1 antibody [EPR24127-89] ab280353

Recombinant RabMAb

1 References 5 Images

Overview

Product name Anti-IFNGR1 antibody [EPR24127-89]

Description Rabbit monoclonal [EPR24127-89] to IFNGR1

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, Flow Cyt, IP

Unsuitable for: IHC-P

Reacts with: Mouse Species reactivity

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: EL4 whole cell lysate. ICC/IF: EL4 cells Flow Cyt: EL4 cells; Mouse blood cells. IP: EL4 cells.

General notes 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 production

For more information see here.

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

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR24127-89

Isotype lgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab280353 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
ICC/IF		1/50.
WB		1/1000. Predicted molecular weight: 54 kDa.
Flow Cyt		1/500.
IP		1/30.

Application notes

Is unsuitable for IHC-P.

Target

Function

Receptor for interferon gamma. Two receptors bind one interferon gamma dimer.

Involvement in disease

Defects in IFNGR1 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. Contains 2 fibronectin type-III domains.

Contains 2 lg-like C2-type (immunoglobulin-like) domains.

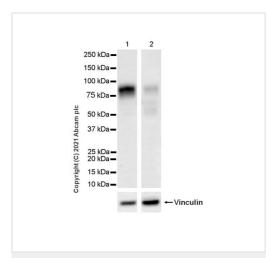
Post-translational modifications

Phosphorylated at Ser/Thr residues.

Cellular localization

Membrane.

Images



Western blot - Anti-IFNGR1 antibody [EPR24127-89] (ab280353)

All lanes : Anti-IFNGR1 antibody [EPR24127-89] (ab280353) at 1/1000 dilution

Lane 1 : EL4 (mouse lymphoma T lymphocyte), whole cell lysate
Lane 2 : 4T1 (mouse mammary gland carcinoma epithelial cell),
whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

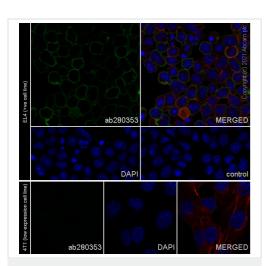
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 54 kDa **Observed band size:** 70-95 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Low expression: 4T1(PMID:12154047)

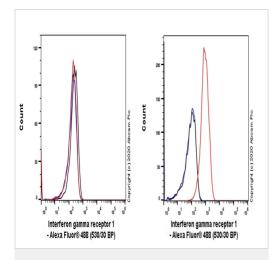
Exposure time: 74 seconds



Immunocytochemistry/ Immunofluorescence - Anti-IFNGR1 antibody [EPR24127-89] (ab280353)

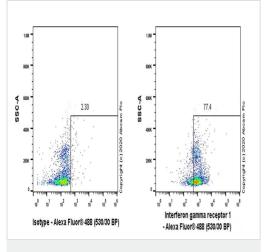
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized EL4 cells labelling IFNGR1 with ab280353 at 1/50 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in EL4 cell line. Low expression control:4T1 (PMID: 12154047) is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



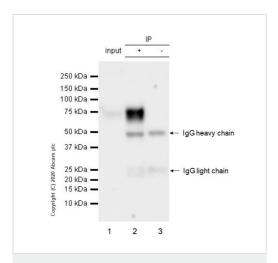
Flow Cytometry - Anti-IFNGR1 antibody [EPR24127-89] (ab280353)

Flow cytometric analysis of 4T1 (mouse mammary gland carcinoma epithelial cell, left)/ EL4 (mouse lymphoma T lymphocyte, right) cells labelling IFNGR1 with ab280353 at 1/500 dilution (Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody. Low expression: 4T1(PMID:12154047) Gated on viable cells.



Flow Cytometry - Anti-IFNGR1 antibody [EPR24127-89] (ab280353)

Flow cytometric analysis of Mouse blood cells cells labelling IFNGR1 with ab280353 at 1/500 dilution (Right) compared with a Rabbit monoclonal IgG (<u>ab172730</u>) isotype control (Left). Goat anti rabbit IgG (Alexa Fluor® 488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.



Immunoprecipitation - Anti-IFNGR1 antibody [EPR24127-89] (ab280353)

IFNGR1 was immunoprecipitated from 0.35 mg EL4 (mouse lymphoma T lymphocyte), whole cell lysate 10 ug with ab280353 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab280353 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: EL4 (mouse lymphoma T lymphocyte), whole cell lysate 10 ug

Lane 2: ab280353 IP in EL4 whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab280353 in EL4 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 15 seconds

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