

**Anti-IFNGR1 Picoband Antibody**  
**Catalog # ABO10207****Specification****Anti-IFNGR1 Picoband Antibody - Product Information**

Application	WB, IHC-F, FC, ICC
Primary Accession	<a href="#">P15260</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Interferon gamma receptor 1(IFNGR1) detection. Tested with WB, IHC-F, ICC, FCM in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-IFNGR1 Picoband Antibody - Additional Information**

**Gene ID** 3459

**Other Names**

Interferon gamma receptor 1 {ECO:0000312|HGNC:HGNC:5439}, IFN-gamma receptor 1, IFN-gamma-R1, CDw119, Interferon gamma receptor alpha-chain, IFN-gamma-R-alpha, CD119, IFNGR1 ([HGNC:5439](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=5439))

**Calculated MW**

54405 MW KDa

**Application Details**

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml  
Immunocytochemistry, 0.5-1 µg/ml  
Western blot, 0.1-0.5 µg/ml  
Flow Cytometry, 1-3<sup>1/4</sup>g/1x10<sup>6</sup> cells

**Subcellular Localization**

Cell membrane ; Single-pass type I membrane protein .

**Protein Name**

Interferon gamma receptor 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human IFNGR1 (443-484aa QELITVIKAPTSFGYDKPHVLVDLLVDDSGKESLIGYRPTED), different from the related mouse sequence by seventeen amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Anti-IFNGR1 Picoband Antibody - Protein Information**

**Name** IFNGR1 ([HGNC:5439](#))

**Function**

Receptor subunit for interferon gamma/INFG that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:<a href="http://www.uniprot.org/citations/20015550" target="\_blank">20015550</a>). Associates with transmembrane accessory factor IFNGR2 to form a functional receptor (PubMed:<a href="http://www.uniprot.org/citations/10986460" target="\_blank">10986460</a>, PubMed:<a href="http://www.uniprot.org/citations/2971451" target="\_blank">2971451</a>, PubMed:<a href="http://www.uniprot.org/citations/7615558" target="\_blank">7615558</a>, PubMed:<a href="http://www.uniprot.org/citations/7617032" target="\_blank">7617032</a>, PubMed:<a href="http://www.uniprot.org/citations/7673114" target="\_blank">7673114</a>). Upon ligand binding, the intracellular domain of IFNGR1 opens out to allow association of downstream signaling components JAK1 and JAK2. In turn, activated JAK1 phosphorylates IFNGR1 to form a docking site for STAT1. Subsequent phosphorylation of STAT1 leads to dimerization, translocation to the nucleus, and stimulation of target gene transcription (PubMed:<a href="http://www.uniprot.org/citations/28883123" target="\_blank">28883123</a>). STAT3 can also be activated in a similar manner although activation seems weaker. IFNGR1 intracellular domain phosphorylation also provides a docking site for SOCS1 that regulates the JAK-STAT pathway by competing with STAT1 binding to IFNGR1 (By similarity).

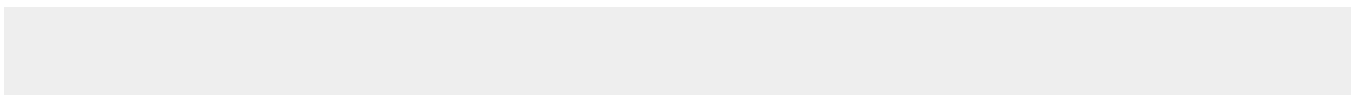
**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Anti-IFNGR1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-IFNGR1 Picoband Antibody - Images**

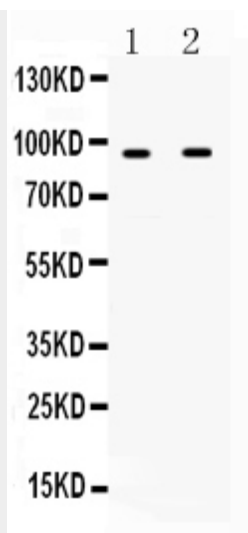


Figure 1. Western blot analysis of IFNGR1 using anti-IFNGR1 antibody (ABO10207). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. lane 1: HEPG2 whole cell lysates, lane 2: SKOV3 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 rabbit anti-IFNGR1 antigen affinity purified polyclonal antibody (Catalog # ABO10207) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit 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 IFNGR1 at approximately 95KD. The expected band size for IFNGR1 is at 54KD.

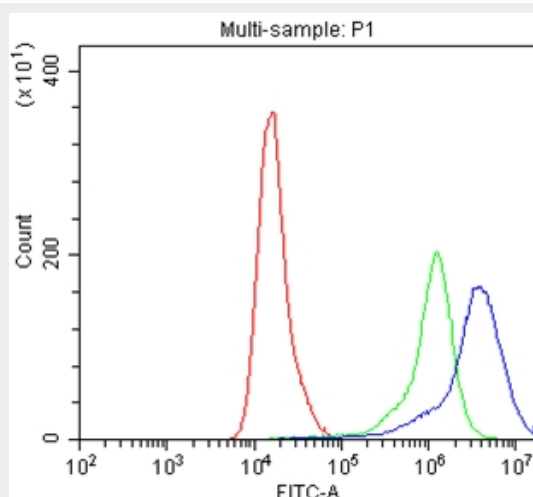


Figure 2. Flow Cytometry analysis of A549 cells using anti-IFNGR1 antibody (ABO10207). Overlay histogram showing A549 cells stained with ABO10207 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IFNGR1 Antibody (ABO10207, 1  $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight 488 conjugated goat anti-rabbit IgG (BA1127, 5-10  $\mu$ g/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1  $\mu$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

#### Anti-IFNGR1 Picoband Antibody - Background

Interferon gamma receptor 1 (IFNGR1), also known as CD119 (Cluster of Differentiation 119), is a

protein that in humans is encoded by the IFNGR1 gene. This gene (IFNGR1) encodes the ligand-binding chain (alpha) of the gamma interferon receptor. Human interferon-gamma receptor is a heterodimer of IFNGR1 and IFNGR2. A genetic variation in IFNGR1 is associated with susceptibility to *Helicobacter pylori* infection. In addition, defects in IFNGR1 are a cause of mendelian susceptibility to mycobacterial disease, also known as familial disseminated atypical mycobacterial infection.