

**Anti-IFNAR1 Picoband Antibody**  
Catalog # ABO10053

**Specification**

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**Anti-IFNAR1 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P17181</a>
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Interferon alpha/beta receptor 1(IFNAR1) detection. Tested with WB in Human;Mouse.

**Reconstitution**

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

**Anti-IFNAR1 Picoband Antibody - Additional Information**

**Gene ID** 3454

**Other Names**

Interferon alpha/beta receptor 1, IFN-R-1, IFN-alpha/beta receptor 1, Cytokine receptor class-II member 1, Cytokine receptor family 2 member 1, CRF2-1, Type I interferon receptor 1, IFNAR1, IFNAR

**Calculated MW**

63525 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse<br>

**Subcellular Localization**

Isoform 1: Cell membrane ; Single- pass type I membrane protein . Late endosome . Lysosome . Interferon binding triggers internalization of the receptor from the cell membrane into endosomes and then into lysosomes. .

**Tissue Specificity**

IFN receptors are present in all tissues and even on the surface of most IFN-resistant cells. Isoform 1, isoform 2 and isoform 3 are expressed in the IFN-alpha sensitive myeloma cell line U266B1. Isoform 2 and isoform 3 are expressed in the IFN-alpha resistant myeloma cell line U266R. Isoform 1 is not expressed in IFN-alpha resistant myeloma cell line U266R. .

**Protein Name**

Interferon alpha/beta receptor 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human IFNAR1 (263-306aa HAFLKRNPNGNHLYKWKQIPDCENVKTTQCVFPQNVFQKGIYLLR).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

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

**Anti-IFNAR1 Picoband Antibody - Protein Information****Name** IFNAR1**Synonyms** IFNAR**Function**

Together with IFNAR2, forms the heterodimeric receptor for type I interferons (including interferons alpha, beta, epsilon, omega and kappa) (PubMed:<a href="http://www.uniprot.org/citations/10049744" target="\_blank">10049744</a>, PubMed:<a href="http://www.uniprot.org/citations/14532120" target="\_blank">14532120</a>, PubMed:<a href="http://www.uniprot.org/citations/15337770" target="\_blank">15337770</a>, PubMed:<a href="http://www.uniprot.org/citations/2153461" target="\_blank">2153461</a>, PubMed:<a href="http://www.uniprot.org/citations/21854986" target="\_blank">21854986</a>, PubMed:<a href="http://www.uniprot.org/citations/24075985" target="\_blank">24075985</a>, PubMed:<a href="http://www.uniprot.org/citations/31270247" target="\_blank">31270247</a>, PubMed:<a href="http://www.uniprot.org/citations/33252644" target="\_blank">33252644</a>, PubMed:<a href="http://www.uniprot.org/citations/35442418" target="\_blank">35442418</a>, PubMed:<a href="http://www.uniprot.org/citations/7813427" target="\_blank">7813427</a>). Type I interferon binding activates the JAK-STAT signaling cascade, resulting in transcriptional activation or repression of interferon-regulated genes that encode the effectors of the interferon response (PubMed:<a href="http://www.uniprot.org/citations/10049744" target="\_blank">10049744</a>, PubMed:<a href="http://www.uniprot.org/citations/21854986" target="\_blank">21854986</a>, PubMed:<a href="http://www.uniprot.org/citations/7665574" target="\_blank">7665574</a>). Mechanistically, type I interferon- binding brings the IFNAR1 and IFNAR2 subunits into close proximity with one another, driving their associated Janus kinases (JAKs) (TYK2 bound to IFNAR1 and JAK1 bound to IFNAR2) to cross-phosphorylate one another (PubMed:<a href="http://www.uniprot.org/citations/21854986" target="\_blank">21854986</a>, PubMed:<a href="http://www.uniprot.org/citations/32972995" target="\_blank">32972995</a>, PubMed:<a href="http://www.uniprot.org/citations/7665574" target="\_blank">7665574</a>, PubMed:<a href="http://www.uniprot.org/citations/7813427" target="\_blank">7813427</a>). The activated kinases phosphorylate specific tyrosine residues on the intracellular domains of IFNAR1 and IFNAR2, forming docking sites for the STAT transcription factors (PubMed:<a href="http://www.uniprot.org/citations/21854986" target="\_blank">21854986</a>, PubMed:<a href="http://www.uniprot.org/citations/32972995" target="\_blank">32972995</a>, PubMed:<a href="http://www.uniprot.org/citations/7526154" target="\_blank">7526154</a>, PubMed:<a href="http://www.uniprot.org/citations/7665574" target="\_blank">7665574</a>, PubMed:<a href="http://www.uniprot.org/citations/7813427" target="\_blank">7813427</a>). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes (PubMed:<a

href="http://www.uniprot.org/citations/19561067" target="\_blank">19561067</a>, PubMed:<a href="http://www.uniprot.org/citations/21854986" target="\_blank">21854986</a>, PubMed:<a href="http://www.uniprot.org/citations/32972995" target="\_blank">32972995</a>, PubMed:<a href="http://www.uniprot.org/citations/7665574" target="\_blank">7665574</a>, PubMed:<a href="http://www.uniprot.org/citations/7813427" target="\_blank">7813427</a>, PubMed:<a href="http://www.uniprot.org/citations/9121453" target="\_blank">9121453</a>). Can also act independently of IFNAR2: form an active IFNB1 receptor by itself and activate a signaling cascade that does not involve activation of the JAK-STAT pathway (By similarity).

#### Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Late endosome. Lysosome. Note=Interferon binding triggers internalization of the receptor from the cell membrane into endosomes and then into lysosomes.

#### Tissue Location

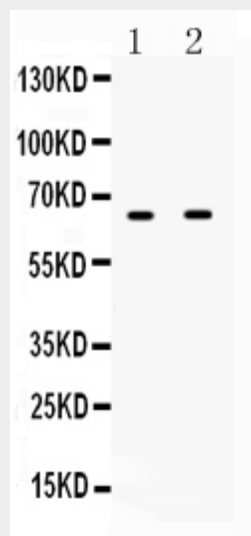
IFN receptors are present in all tissues and even on the surface of most IFN-resistant cells. Isoform 1, isoform 2 and isoform 3 are expressed in the IFN-alpha sensitive myeloma cell line U266B1. Isoform 2 and isoform 3 are expressed in the IFN-alpha resistant myeloma cell line U266R. Isoform 1 is not expressed in IFN- alpha resistant myeloma cell line U266R.

#### Anti-IFNAR1 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-IFNAR1 Picoband Antibody - Images



Western blot analysis of IFNAR1 expression in HELA whole cell lysates (lane 1) and NIH3T3 whole cell lysates (lane 2). IFNAR1 at 64KD was detected using rabbit anti- IFNAR1 Antigen Affinity

purified polyclonal antibody (Catalog # ABO10053) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

#### **Anti-IFNAR1 Picoband Antibody - Background**

Interferon-alpha/beta receptor alpha chain is a protein that in humans is encoded by the IFNAR1 gene. The protein encoded by this gene is a type I membrane protein that forms one of the two chains of a receptor for interferons alpha and beta. Binding and activation of the receptor stimulates Janus protein kinases, which in turn phosphorylate several proteins, including STAT1 and STAT2. The encoded protein also functions as an antiviral factor.