

**IFNAR1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8550c****Specification**

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**IFNAR1 Antibody (Center) - Product Information**

Application	WB, FC, IHC-P-Leica,E
Primary Accession	<a href="#">P17181</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	162-188

**IFNAR1 Antibody (Center) - 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

**Target/Specificity**

This IFNAR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 162-188 amino acids of human IFNAR1.

**Dilution**

WB~~1:1000

FC~~1:25

IHC-P-Leica~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

IFNAR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**IFNAR1 Antibody (Center) - 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:[10049744](#), PubMed:[14532120](#), PubMed:[15337770](#), PubMed:[2153461](#), PubMed:[21854986](#), PubMed:[24075985](#), PubMed:[31270247](#), PubMed:[33252644](#), PubMed:[35442418](#), PubMed:[7813427](#)). 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:[10049744](#), PubMed:[21854986](#), PubMed:[7665574](#)). 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:[21854986](#), PubMed:[32972995](#), PubMed:[7665574](#), PubMed:[7813427](#)). The activated kinases phosphorylate specific tyrosine residues on the intracellular domains of IFNAR1 and IFNAR2, forming docking sites for the STAT transcription factors (PubMed:[21854986](#), PubMed:[32972995](#), PubMed:[7526154](#), PubMed:[7665574](#), PubMed:[7813427](#)). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes (PubMed:[19561067](#), PubMed:[21854986](#), PubMed:[32972995](#), PubMed:[7665574](#), PubMed:[7813427](#), PubMed:[9121453](#)). 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.

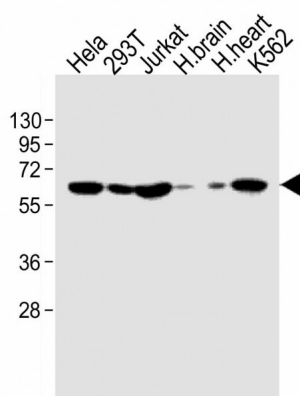
## IFNAR1 Antibody (Center) - Protocols

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

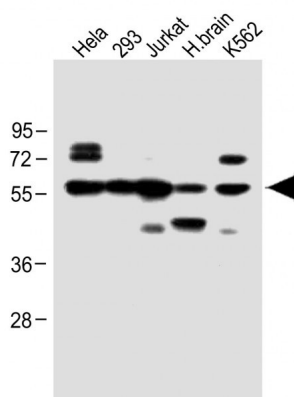
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## IFNAR1 Antibody (Center) - Images





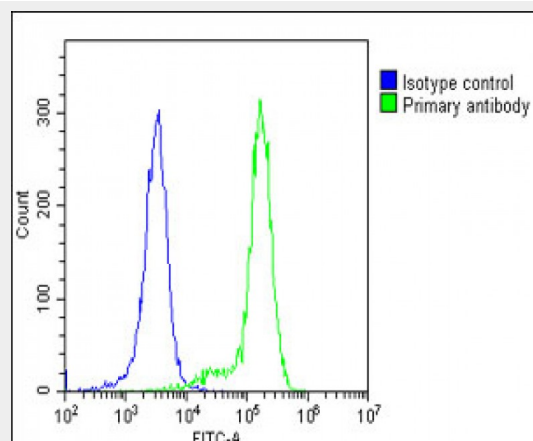
All lanes : Anti-IFNAR1 Antibody (Center) at 1:1000 dilution Lane 1: HeLa whole cell lysate Lane 2: 293T whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: human brain lysate Lane 5: human heart lysate Lane 6: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 64 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-IFNAR1 Antibody (Center) at 1:1000 dilution Lane 1: HeLa whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: H. brain whole cell lysate Lane 5: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 64 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human brain tissue using AP8550C performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody(1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing K562 cells stained with AP8550C(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP8550C, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

### IFNAR1 Antibody (Center) - Background

IFNAR1 is the receptor for interferons alpha and beta. Binding to type I IFNs triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and IFNR alpha-and beta-subunits themselves.

### IFNAR1 Antibody (Center) - Citations

- [Function of multiple sclerosis-protective HLA class I alleles revealed by genome-wide protein-quantitative trait loci mapping of interferon signalling](#)
- [Resolving TYK2 locus genotype-to-phenotype differences in autoimmunity](#)

