

**Anti-IFNAR1 Reference Antibody (anifrolumab)  
Recombinant Antibody  
Catalog # APR10158****Specification**

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**Anti-IFNAR1 Reference Antibody (anifrolumab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">P17181</a>
Reactivity	Cynomolgus, Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	144.92 KDa

**Anti-IFNAR1 Reference Antibody (anifrolumab) - Additional Information****Target/Specificity**  
IFNAR1**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Anti-IFNAR1 Reference Antibody (anifrolumab) - 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

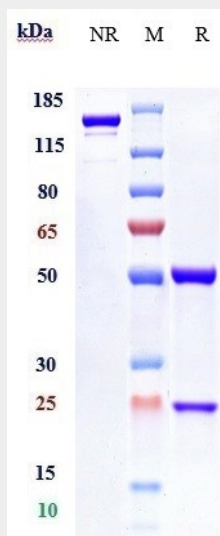
IFN receptors are present in all tissues and even on the surface of most IFN-resistant cells. Isoform 1, isoform 2 and isoform 3 are expressed in the IFN-alpha sensitive myeloma cell line U266B1. Isoform 2 and isoform 3 are expressed in the IFN-alpha resistant myeloma cell line U266R. Isoform 1 is not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

### Anti-IFNAR1 Reference Antibody (anifrolumab) - Protocols

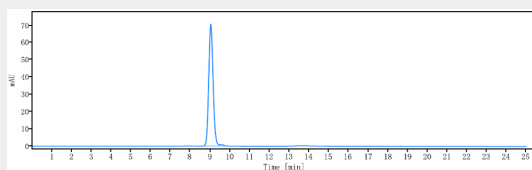
Provided below are standard protocols that you may find useful for product applications.

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

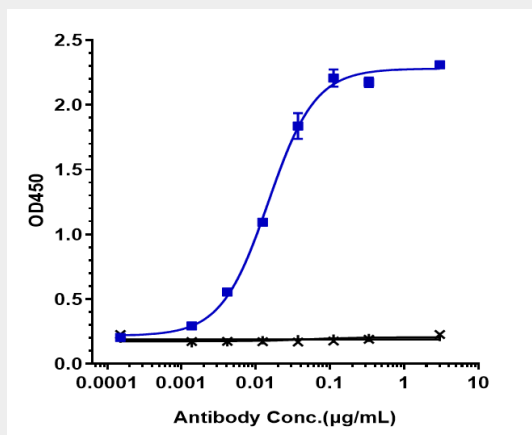
### Anti-IFNAR1 Reference Antibody (anifrolumab) - Images



Anti-IFNAR1 Reference Antibody (anifrolumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-IFNAR1 Reference Antibody (anifrolumab) is more than 98.75% ,determined by SEC-HPLC.



Immobilized human IFNAR1, Fc at 2 µg/mL can bind Anti-IFNAR1 Reference Antibody (anifrolumab) □ EC50=0.0147 µg/mL