

**IFN- $\alpha$ / $\beta$ R $\alpha$  Polyclonal Antibody**  
Catalog # AP74089**Specification****IFN- $\alpha$ / $\beta$ R $\alpha$  Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P17181</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**IFN- $\alpha$ / $\beta$ R $\alpha$  Polyclonal 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)

**Dilution**

IHC~~IHC-p 1:50-200, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**IFN- $\alpha$ / $\beta$ R $\alpha$  Polyclonal 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.

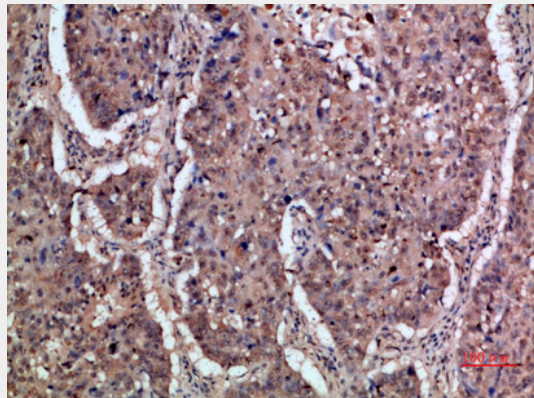
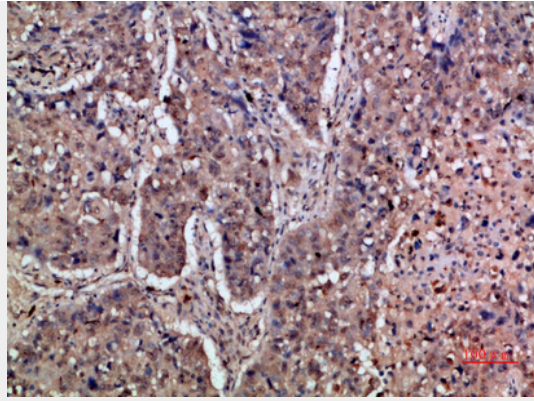
#### IFN- $\alpha/\beta$ R $\alpha$ Polyclonal Antibody - Protocols

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](#)

#### IFN- $\alpha/\beta$ R $\alpha$ Polyclonal Antibody - Images





### **IFN- $\alpha$ / $\beta$ R $\alpha$ Polyclonal Antibody - Background**

Component of the receptor for type I interferons, including interferons alpha, IFNB1 and IFNW1 (PubMed:2153461, PubMed:7665574, PubMed:10049744, PubMed:14532120, PubMed:15337770, PubMed:21854986). Functions in general as heterodimer with IFNAR2 (PubMed:7665574, PubMed:10049744, PubMed:21854986). Type I interferon binding activates the JAK-STAT signaling cascade, and triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and the IFNR alpha- and beta- subunits themselves (PubMed:7665574, PubMed:21854986). Can form an active IFNB1 receptor by itself and activate a signaling cascade that does not involve activation of the JAK-STAT pathway (By similarity).