

# Anti-IFNAR2 Antibody

Rabbit polyclonal antibody to IFNAR2 Catalog # AP61130

#### **Product Information**

Application WB, IHC
Primary Accession P48551
Other Accession O35664

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW57759

#### **Additional Information**

**Gene ID** 3455

Other Names IFNABR; IFNARB; Interferon alpha/beta receptor 2; IFN-R-2; IFN-alpha binding

protein; IFN-alpha/beta receptor 2; Interferon alpha binding protein; Type I

interferon receptor 2

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human IFNAR2. The exact sequence is proprietary.

**Dilution** WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/50 - 1/200)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name IFNAR2

Synonyms IFNABR, IFNARB

**Function** Together with IFNAR1, forms the heterodimeric receptor for type I

interferons (including interferons alpha, beta, epsilon, omega and kappa)

(PubMed:10049744, PubMed:10556041, PubMed:21854986,

PubMed:<u>26424569</u>, PubMed:<u>28165510</u>, PubMed:<u>32972995</u>, PubMed:<u>7665574</u>, PubMed:<u>7759950</u>, PubMed:<u>8181059</u>, PubMed:<u>8798579</u>, PubMed:<u>8969169</u>). 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:<u>10049744</u>,

PubMed: <u>17517919</u>, PubMed: <u>21854986</u>, PubMed: <u>26424569</u>,

PubMed:28165510, PubMed:32972995, PubMed:7665574, PubMed:7759950, PubMed:8181059, PubMed:8798579, PubMed:8969169). 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:10556041, PubMed:11682488, PubMed:12105218, PubMed:21854986, PubMed:32972995). The activated kinases phosphorylate specific tyrosine residues on the intracellular domains of IFNAR1 and IFNAR2, forming docking sites for the STAT transcription factors (STAT1, STAT2 and STAT) (PubMed:11682488, PubMed:12105218, PubMed:21854986, PubMed:32972995). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes (PubMed:12105218, PubMed:28165510, PubMed:9121453).

**Cellular Location** 

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted

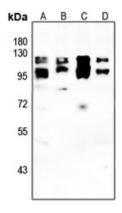
**Tissue Location** 

Isoform 3 is detected in the urine (at protein level) (PubMed:7759950, PubMed:8181059). Expressed in blood cells Expressed in lymphoblastoid and fibrosarcoma cell lines

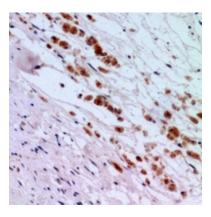
## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human IFNAR2. The exact sequence is proprietary.

### **Images**



Western blot analysis of IFNAR2 expression in PC12 (A), NIH3T3 (B), MCF7 (C), PC3 (D) whole cell lysates.



Immunohistochemical analysis of IFNAR2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.