

Anti-IFNAR1 (pY466) Antibody

Rabbit polyclonal antibody to IFNAR1 (pY466) Catalog # AP60017

Product Information

Application WB, IHC
Primary Accession P17181
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 63525

Additional Information

Gene ID 3454

Other Names IFNAR; 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

Target/Specificity Recognizes endogenous levels of IFNAR1 (pY466) protein.

Dilution WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IHC~~1:100~500

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 IFNAR1

Synonyms IFNAR

Function Together with IFNAR2, forms the heterodimeric receptor for type I

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

(PubMed: <u>10049744</u>, PubMed: <u>14532120</u>, PubMed: <u>15337770</u>,

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.

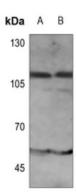
Tissue Location

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.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human IFNAR1 (pY466). The exact sequence is proprietary.

Images



Western blot analysis of IFNAR1 (pY466) expression in A549 (A), H446 (B) whole cell lysates.

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