10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IFN-αR2 Polyclonal Antibody

Catalog # AP73550

Product Information

Application	WB, IHC-P
Primary Accession	P48551
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57759

Additional Information

Gene ID	3455
Other Names	IFNAR2; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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:26424569, PubMed:28165510, PubMed:32972995, PubMed:7665574, PubMed:7759950, PubMed:8181059, PubMed:8798579, PubMed:8969169). 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:17517919, PubMed:21854986, PubMed:26424569, 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

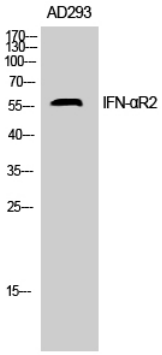
Tissue Location

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

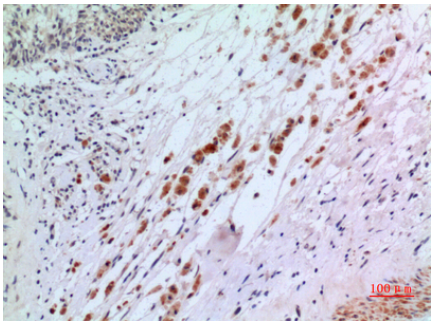
Background

Associates with IFNAR1 to form the type I interferon receptor. Receptor for interferons alpha and beta. Involved in IFN-mediated STAT1, STAT2 and STAT3 activation (PubMed:26424569). Isoform 1 and isoform 2 are directly involved in signal transduction due to their association with the TYR kinase, JAK1 (PubMed:8181059, PubMed:7665574, PubMed:7759950). Isoform 3 is a potent inhibitor of type I IFN receptor activity (PubMed:7759950).

Images



Western Blot analysis of AD293 cells using IFN-αR2 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100