

Interferon beta Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51902

Specification

Interferon beta Antibody - Product Information

Application	WB, E
Primary Accession	P01574
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22 KDa

Interferon beta Antibody - Additional Information

Gene ID 3456

Other Names

Interferon beta, IFN-beta, Fibroblast interferon, IFNB1, IFB, IFNB

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

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

Interferon beta Antibody - Protein Information

Name IFNB1 ([HGNC:5434](#))

Synonyms IFB, IFNB

Function

Type I interferon cytokine that plays a key role in the innate immune response to infection, developing tumors and other inflammatory stimuli (PubMed: [10049744](http://www.uniprot.org/citations/10049744), PubMed: [10556041](http://www.uniprot.org/citations/10556041), PubMed: [6157094](http://www.uniprot.org/citations/6157094), PubMed: [6171735](http://www.uniprot.org/citations/6171735), PubMed: [7665574](http://www.uniprot.org/citations/7665574), PubMed: [8027027](http://www.uniprot.org/citations/8027027), PubMed: [8969169](http://www.uniprot.org/citations/8969169)). Signals via binding to high-affinity (IFNAR2) and low-affinity (IFNAR1) heterodimeric receptor, activating the canonical Jak-STAT signaling pathway resulting in transcriptional activation or repression of interferon-regulated genes that encode the effectors of the interferon response, such as antiviral proteins, regulators of cell proliferation and differentiation, and immunoregulatory proteins (PubMed: [10049744](http://www.uniprot.org/citations/10049744), PubMed: [10556041](http://www.uniprot.org/citations/10556041),

PubMed: 7665574,
PubMed: 8027027,
PubMed: 8969169).
Signals mostly via binding to a IFNAR1-IFNAR2 heterodimeric receptor, but can also function with IFNAR1 alone and independently of Jak-STAT pathways (By similarity). Elicits a wide variety of responses, including antiviral and antibacterial activities, and can regulate the development of B-cells, myelopoiesis and lipopolysaccharide (LPS)- inducible production of tumor necrosis factor (By similarity). Plays a role in neuronal homeostasis by regulating dopamine turnover and protecting dopaminergic neurons: acts by promoting neuronal autophagy and alpha-synuclein clearance, thereby preventing dopaminergic neuron loss (By similarity). IFNB1 is more potent than interferon-alpha (IFN- alpha) in inducing the apoptotic and antiproliferative pathways required for control of tumor cell growth (By similarity).

Cellular Location

Secreted.

Interferon beta 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](#)

Interferon beta Antibody - Images

Interferon beta Antibody - Background

Has antiviral, antibacterial and anticancer activities.

Interferon beta Antibody - References

Lawn R.M., et al. Nucleic Acids Res. 9:1045-1052(1981).
Ohno S., et al. Proc. Natl. Acad. Sci. U.S.A. 78:5305-5309(1981).
Taniguchi T., et al. Gene 10:11-15(1980).
Derynck R., et al. Nature 285:542-547(1980).
Houghton M., et al. Nucleic Acids Res. 8:2885-2894(1980).