

# Interferon beta Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51902

## Product Information

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Application	WB
Primary Accession	<a href="#">P01574</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22294

## Additional Information

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Gene ID	3456
Other Names	Interferon beta, IFN-beta, Fibroblast interferon, IFNB1, IFB, IFNB
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IFN beta. The exact sequence is proprietary.
Dilution	WB~~1:1000
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

## Protein Information

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Name	IFNB1 ( <a href="#">HGNC:5434</a> )
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: <a href="#">10049744</a> , PubMed: <a href="#">10556041</a> , PubMed: <a href="#">6157094</a> , PubMed: <a href="#">6171735</a> , PubMed: <a href="#">7665574</a> , PubMed: <a href="#">8027027</a> , PubMed: <a href="#">8969169</a> ). 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: <a href="#">10049744</a> , PubMed: <a href="#">10556041</a> , PubMed: <a href="#">7665574</a> , PubMed: <a href="#">8027027</a> , PubMed: <a href="#">8969169</a> ). 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.

## Background

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Has antiviral, antibacterial and anticancer activities.

## References

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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).

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