

Interferon beta Antibody

Rabbit mAb Catalog # AP91121

Product Information

Application Primary Accession Reactivity Clonality Other Names	WB, IP <u>P01574</u> Human Monoclonal Interferon beta; Interferon β; IFN-beta; IFN-β; IFNβ; Fibroblast interferon; IFB; IFNB;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	22294

Additional Information

Dilution	WB 1:500~1:2000 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Interferon beta
Description	The type I interferon (IFN) family includes IFN- β 1 and IFN- α 1 through IFN- α 13 in humans and IFN- α 1 through IFN- α 14 in mice. Type I IFN is produced following detection of pathogen-associated molecular patterns (PAMPs) and is important for induction of antiviral genes, activation of dendritic cells, and initiation of adaptive immunity. Has antiviral, antibacterial and anticancer activities.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	IFNB1 (<u>HGNC:5434</u>)
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, PubMed:10556041, PubMed:6157094, PubMed:6171735, PubMed:7665574, PubMed:8027027, PubMed: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, PubMed:10556041, PubMed:7665574, PubMed:8027027,

PubMed:<u>8969169</u>). 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

Images



Western blot analysis of Interferon beta expression in HeLa cell lysate.

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