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Interferon beta Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51902

Product Information

Application WB Primary Accession P01574

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW22294

Additional Information

Gene ID 3456

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

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

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, 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: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.

Background

Has antiviral, antibacterial and anticancer activities.

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).

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