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IFNB1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8568b

Product Information

Application	WB, E
Primary Accession	P01574
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1394CT509.46.3
Calculated MW	22294

Additional Information

Gene ID	3456
Other Names	Interferon beta, IFN-beta, Fibroblast interferon, IFNB1, IFB, IFNB
Target/Specificity	This IFNB1 antibody is generated from a mouse immunized with a recombinant protein between 1-187 amino acids from human IFNB1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IFNB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

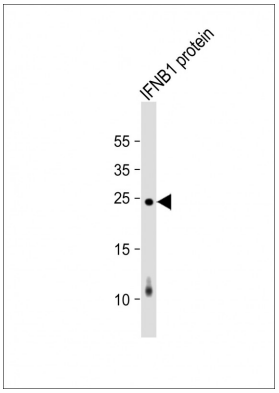
Background

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).

Images



Anti-IFNB1 Antibody at 1:2000 dilution + IFNB1 protein lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.