

IFNB1 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8568b

Product Information

ApplicationWB, EPrimary AccessionP01574ReactivityHumanHostMouseClonalitymonoclonalIsotypeIgG1,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.

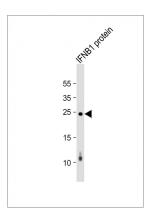
Background

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.

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