

### **IFNB1** Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8568b

## **Specification**

### **IFNB1 Antibody - Product Information**

Application WB,E
Primary Accession P01574
Reactivity Human
Host Mouse
Clonality monoclonal
Isotype IgG1,k
Calculated MW 22294

# **IFNB1** Antibody - 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.

## **IFNB1 Antibody - 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).

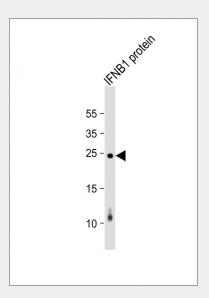
**Cellular Location** Secreted.

#### **IFNB1** Antibody - Protocols

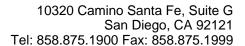
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **IFNB1 Antibody - 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.

# IFNB1 Antibody - Background

Has antiviral, antibacterial and anticancer activities.

# **IFNB1** Antibody - 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).