

# IFNB1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP8539a

# **Specification**

# IFNB1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

P01574

# IFNB1 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 3456** 

#### **Other Names**

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

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8539a>AP8539a</a> was selected from the N-term region of human IFNB1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# IFNB1 Antibody (N-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/6157094" target=" blank">6157094</a>, PubMed:<a

href="http://www.uniprot.org/citations/6171735" target="blank">6171735</a>, PubMed:<a

href="http://www.uniprot.org/citations/8027027" target="\_blank">8027027</a>, PubMed:<a

href="http://www.uniprot.org/citations/7665574" target="\_blank">7665574</a>, PubMed:<a

href="http://www.uniprot.org/citations/8969169" target="\_blank">8969169</a>, PubMed:<a

href="http://www.uniprot.org/citations/10049744" target="\_blank">10049744</a>, PubMed:<a href="http://www.uniprot.org/citations/10556041" target="\_blank">10556041</a>). 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:<a href="http://www.uniprot.org/citations/8027027" target="\_blank">8027027</a>, PubMed:<a href="http://www.uniprot.org/citations/7665574" target=" blank">7665574</a>, PubMed: <a href="http://www.uniprot.org/citations/8969169" target="blank">8969169</a>, PubMed: <a href="http://www.uniprot.org/citations/10049744" target=" blank">10049744</a>, PubMed:<a href="http://www.uniprot.org/citations/10556041" target="blank">10556041</a>). 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 (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides

IFNB1 Antibody (N-term) Blocking Peptide - Images

IFNB1 Antibody (N-term) Blocking Peptide - Background

IFNB1 has antiviral, antibacterial and anticancer activities.

IFNB1 Antibody (N-term) Blocking Peptide - References

Lienenklaus, S., et.al., J. Immunol. 183 (5), 3229-3236 (2009) Eto, T. et.al., Nat. Med. 5 (5), 577-581 (1999)