



[7665574](http://www.uniprot.org/citations/7665574), PubMed: [8027027](http://www.uniprot.org/citations/8027027), PubMed: [8969169](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10049744), PubMed: [10556041](http://www.uniprot.org/citations/10556041), PubMed: [7665574](http://www.uniprot.org/citations/7665574), PubMed: [8027027](http://www.uniprot.org/citations/8027027), PubMed: [8969169](http://www.uniprot.org/citations/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

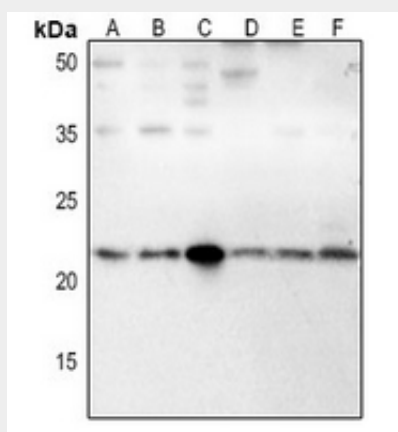
Secreted.

#### Anti-IFN beta Antibody - Protocols

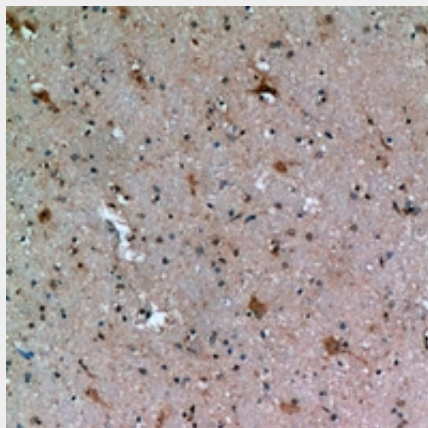
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-IFN beta Antibody - Images



Western blot analysis of IFN beta expression in Hela (A), H1688 (B), H446 (C), mouse lung (D), mouse kidney (E), rat spleen (F) whole cell lysates.



Immunohistochemical analysis of IFN beta staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-IFN beta Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IFN beta. The exact sequence is proprietary.