

## IFN-beta Monoclonal Antibody(Capture)

**catalog number: AN002700P**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

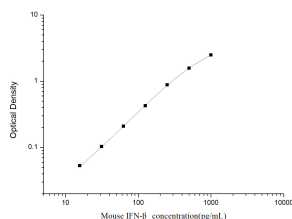
### Description

<b>Reactivity</b>	Mouse
<b>Immunogen</b>	Recombinant Mouse IFN-beta protein expressed by Mammalian
<b>Host</b>	Rat
<b>Isotype</b>	Rat IgG1
<b>Clone</b>	4F9
<b>Purification</b>	Protein A/G Purification
<b>Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

### Applications

<b>ELISA Capture</b>	2-8 µg/mL
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### Data



Sandwich ELISA-Recombinant Mouse IFN-beta protein standard curve. Background subtracted standard curve using

IFN-beta antibody(AN002700P)(Capture), IFN-beta antibody(AN002710P)(Detector) in sandwich ELISA. The reference range value for Recombinant Mouse IFN-beta protein is 15.63-1000 pg/mL.

### Preparation & Storage

<b>Storage</b>	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
<b>Shipping</b>	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

### Background

### For Research Use Only

Type I interferon cytokine that plays a key role in the innate immune response to infection, developing tumors and other inflammatory stimuli. 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. Signals mostly via binding to a IFNAR1-IFNAR2 heterodimeric receptor, but can also function with IFNAR1 alone and independently of Jak-STAT pathways. 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. 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. IFNB1 is more potent than interferon-alpha (IFN-alpha) in inducing the apoptotic and antiproliferative pathways required for control of tumor cell growth.

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