# **Elabscience**®

### IFN-beta Monoclonal Antibody(Detector)

### catalog number: AN002710P

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

Description	
Reactivity	Mouse
Immunogen	Recombinant Mouse IFN-beta protein expressed by Mammalian
Host	Rat
Isotype	Rat IgG1
Clone	3E12
Purification	Protein A/G Purification
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% Proclin300.
Applications	Recommended Dilution
ELISA Detector	0.1-0.4 μg/mL

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

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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.