

Product datasheet for **PP1230B2**

Interferon beta (IFNB1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	Direct ELISA: To detect Human IFN beta by Direct ELISA (using 100 µl/well antibody solution) a concentration of at least 1.0 µg/ml of this antibody is required. This Biotinylated antibody allows the detection of 0.2-0.4 ng/well of recombinant Human IFN beta. Sandwich ELISA: To detect Human IFN beta by Sandwich ELISA (using 100 µl/well antibody solution) a concentration of at least 0.25-1.0 µg/ml of this antibody is required. This Biotinylated antibody in conjunction with Anti Human IFN beta antibody (<i>@t.no</i> PP1230P1 or PP1230P2) as a <i>Capture</i> antibody, allows the detection of at least 0.2-0.4 ng/well of recombinant Human IFN beta. Western Blot: To detect Human IFN beta by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Human IFN beta is 1.5-3.0 ng/lane, under either <i>reducing</i> or <i>non-reducing</i> conditions.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Highly pure (> 98%) <i>E.coli</i> derived recombinant Human IFN beta
Specificity:	This antibody recognizes Human IFNB / Interferon beta. Other species not tested.
Formulation:	PBS, pH 7.2 without preservatives. Label: Biotin State: Lyophilized (sterile filtered) purified Ig fraction.
Reconstitution Method:	Restore in sterile PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Purification:	Affinity Chromatography.
Conjugation:	Biotin
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.



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Stability: Shelf life: one year from despatch.

Gene Name: interferon beta 1

Database Link: [Entrez Gene 3456 Human P01574](#)

Background: The mammalian type I Interferons (IFN1) are produced in response to viral infection and other inducers. They are divided into alpha and beta subtypes leukocytes and fibroblasts reactivity. The human IFN alphas are encoded by a family of at least 15 different genes, while IFN beta is the unique member of its subtype. There is approximately 50% amino acid homology between the alpha and beta subtypes. Both IFN subtypes are pleiotropic cytokines and have a similar range of biological activities. Differences between alpha subtypes, and between IFN alpha and betas, are in potency and cell type specific activities. In particular, IFN beta elicits a markedly higher antiproliferation response in some cell types such as, embryonal carcinoma, melanoma and melanocytes than do IFN alphas. Higher potency of IFN beta in treatment of multiple sclerosis and certain cancers has been observed. Type I IFNs signal through binding to a common cell surface receptor. Two chains of the receptor, IFNAR1 and IFNAR2, have been identified. Both chains are necessary for function and in the absence of either there is neither high affinity binding nor biological activity. The intracellular portions of the receptor subunits are bound by tyrosine kinases, Jak1 and Tyk2, members of the Janus kinase family. Upon ligand binding these kinases are activated and phosphorylate members of the STAT family of transcription factors, as well as IFNAR1 and 2.

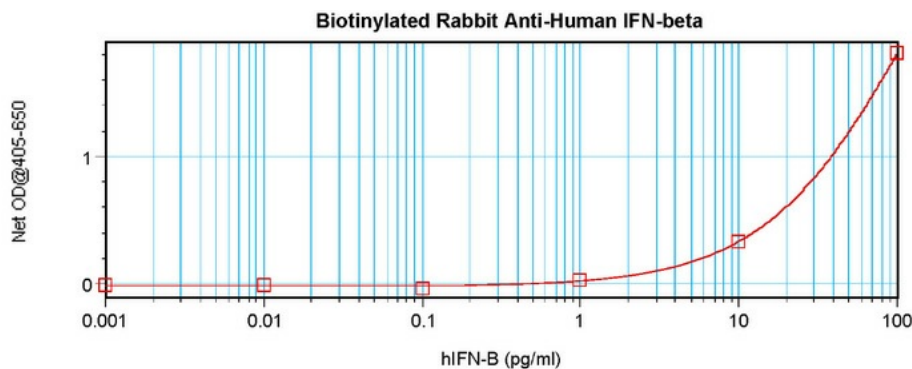
Synonyms: IFN-beta, IFNB1, IFB, Fibroblast interferon

Note: Centrifuge vial prior to opening.

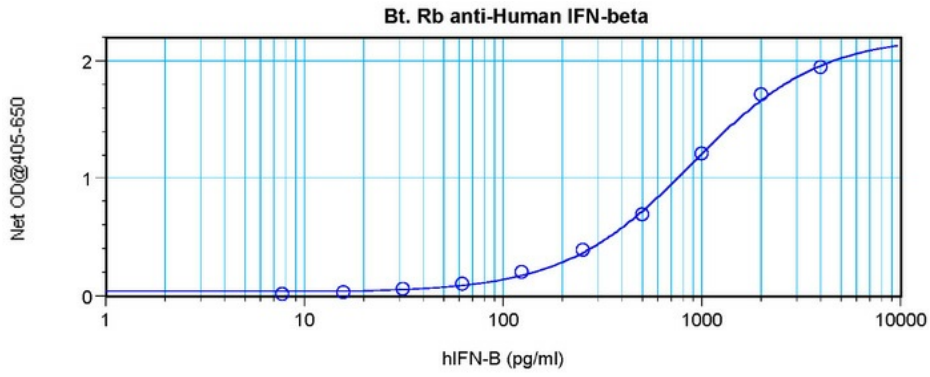
Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing pathway, Jak-STAT signaling pathway, Natural killer cell mediated cytotoxicity, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway

Product images:



Direct ELISA using Biotin conjugated IFNB / Interferon beta Antibody (Cat.-No [PP1230B])



Sandwich ELISA using Biotin conjugated IFNB / Interferon beta Antibody (Cat.-No [PP1230B])