

Interferon Beta (IFN β) Active Protein | IFN β active protein

Active Interferon Beta (IFN β)

CATALOG # AAA152231	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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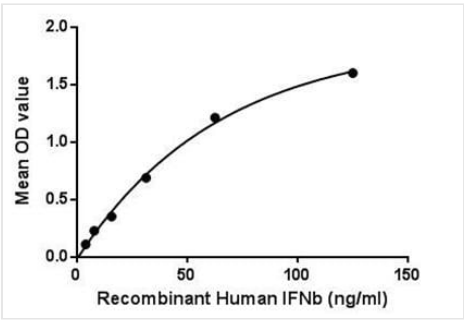
PRODUCT SYNONYMS

Interferon Beta (IFN β); Active Interferon Beta (IFN β); IFN β /Interferon Beta; IFNB1; IFN-B; IFB; IFF; IFNB; Interferon Beta 1 Fibroblast; IFN β active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. Freeze-dried powder
Sequence	Ile22~Asn1 82
Applicable Applications for IFN β active protein	Activity Assay, Cell Culture
Species	Mouse
Isoelectric Point	9.7
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1 μ g (determined by the LAL method)
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored.

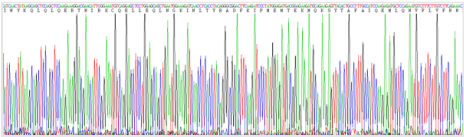
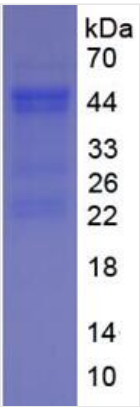
IMAGES



Bioactivity

Interferon Beta (IFNβ) belongs to type I interferons (IFNs) family which is a large subgroup of interferon proteins that help regulate the activity of the immune system. The IFNβ proteins are produced in large quantities by fibroblasts. They have antiviral activity that is involved mainly in innate immune response. Two types of IFNβ have been described, IFNβ1 (IFNB1) and IFNβ3 (IFNB3). IFNβ1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. Besides, Interferon Alpha/Beta Receptor 1 (IFNα/bR1) has been identified as an interactor of IFNβ, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IFNβ and recombinant human IFNα/bR1. Briefly, IFNβ were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to EP300-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-IFNβ pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of IFNβ and IFNα/bR1 was shown in Figure 1, and this effect was in a dose dependent manner.

SDS-PAGE
SDS-PAGE



Sequence

Gene Sequencing (extract)

ADDITIONAL INFORMATION

Product Categories/Family for IFNβ active protein	Cytokine; Tumor immunity; Infection immunity; Active proteins/AP
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6754304
NCBI GeneID	15977
NCBI Accession #	NP_034640.1
NCBI GenBank Nucleotide #	NM_010510.1
UniProt Accession #	P01575
Molecular Weight	22,127 Da
NCBI Official Full Name	interferon beta
NCBI Official Synonym Full Names	interferon beta 1, fibroblast
NCBI Official Symbol	ifnb1
NCBI Official Synonym Symbols	lfb; IFNB; IFN-beta
NCBI Protein Information	interferon beta
UniProt Protein Name	Interferon beta

UniProt Gene Name	Ifnb1
UniProt Synonym Gene Names	lfb; Ifnb; IFN-beta
UniProt Entry Name	IFNB_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/interferon-beta-ifnb/152231>