

Active Recombinant Human IFNB1 protein, His-tagged

Cat. No. IFNB1-3102H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human IFNB1 protein(P01574)(22~187 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	22-187 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Interferon Beta (IFNb) is belongs to type I interferons (IFNs) family which a large subgroup of interferon proteins that help regulate the activity of the immune system.The IFNb proteins are produced in large quantities by fibroblasts. They have antiviral activity that is involved mainly in innate immune response. Two types of IFNb have been described, IFNb1 (IFNB1) and IFNb3 (IFNB3). IFNb1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. To test the effect of IFNb on cell apoptosis, A549 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 5% serum standard DMEM prior to the addition of various concentrations of recombinant human IFNb. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μof CCK-8 solution was added to each well

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of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Apoptosis of A549 cells after incubation with IFN β for 48h observed by inverted microscope was shown. Cell viability was assessed by CCK-8(Cell Counting Kit-8) assay after incubation with recombinant IFN β for 48h. It was obvious that IFN β significantly decreased cell viability of A549 cells. The ED50 of recombinant human IFN β is 6.4 μ g/mL.

Molecular Mass	23.7kDa
Endotoxin	<1.0EU per 1 μ g (determined by the LAL method).
Purity	> 97% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in ddH ₂ O to a concentration of 0.1-0.5 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	IFNB1 interferon, beta 1, fibroblast [Homo sapiens]
Official Symbol	IFNB1
Synonyms	IFNB1; interferon, beta 1, fibroblast; IFNB; interferon beta; IFB; IFF; IFN-beta; fibroblast interferon; MGC96956;
Gene ID	3456
mRNA Refseq	NM_002176

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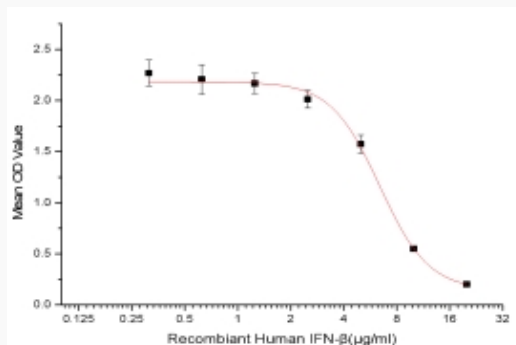
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Protein Refseq NP_002167

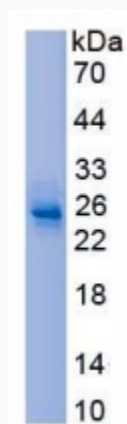
MIM 147640

UniProt ID P01574

Activity



SDS-PAGE



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