

Active Recombinant Dog IFNB1 protein, His-tagged

Cat. No. IFNB1-981D Lot. No. (See product label)

SPECIFICATION

Product Overview	Active Recombinant Dog IFNB1 protein(B6E116)(21~186 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Dog
Source	HEK293
ProteinLength	21-186 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Interferon Beta (IFN β) 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 IFN β proteins are produced in large quantities by fibroblasts. They have antiviral activity that is involved mainly in innate immune response. Two types of IFN β have been described, IFN β 1 (IFNB1) and IFN β 3 (IFNB3). IFN β 1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. To test the effect of IFN β on cell apoptosis, A549 cells were seeded into triplicate wells of 96-well plates at a density of 4,000 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 dog IFN β . After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μ of CCK-8 solution was added to each well of

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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 EC50 of recombinant dog IFN β is 1.65 μ g/ml.

Molecular Mass	21.7kDa
Endotoxin	<1.0EU per 1 μ g (determined by the LAL method).
Purity	> 90% 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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	IFNB1 interferon, beta 1, fibroblast [<i>Canis lupus familiaris</i>]
Official Symbol	IFNB1
Synonyms	IFNB1; interferon, beta 1, fibroblast; interferon beta;
Gene ID	481558
mRNA Refseq	NM_001135787

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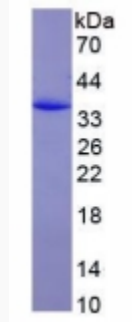
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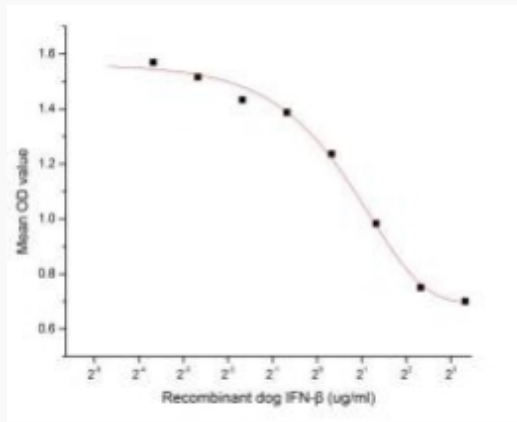
Protein Refseq

NP_001129259

SDS-PAGE



Activity



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