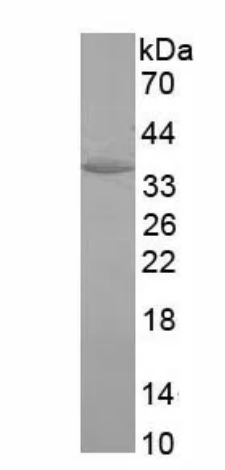
Active Interferon Beta (IFNb)

Catalog#:PHV12285

概述（Summary）

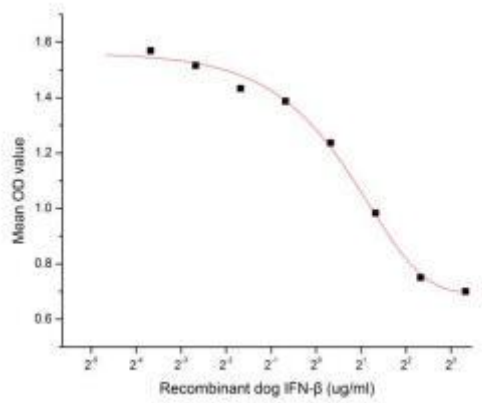
别称（Alternative Names）	IFNB1; IFN-B; IFB; IFF; IFNB; Interferon Beta 1 Fibroblast
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala21-Asn186】
Accession #	B6E116
表达宿主（Host）	293F
种属（Species）	Canis familiaris; Canine (Dog)
预测分子量（Predicted MW）	21.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



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 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 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 µl of CCK-8 solution was added to each well 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 ℃. Apoptosis of A549 cells after incubation with IFNb for 48h observed by inverted microscope was shown in Figure1. Cell viability was assessed by CCK-8(Cell Counting Kit-8) assay after incubation with recombinant IFNb for 48h. The result was shown in Figure2. It was obvious that IFNb significantly decreased cell viability of A549 cells. The EC50 of recombinant dog IFNb is 1.65 µg/ml. Figure 2. Cell apoptosis of A549 cells after stimulated with IFNb.

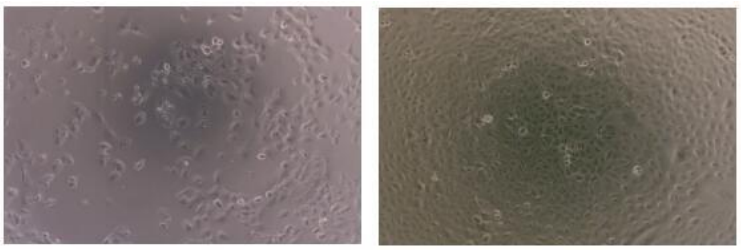


Figure 1. Cell apoptosis of A549 cells after stimulated with IFNb.
(A) A549 cells cultured in DMEM, stimulated with 1.25 ug/ml IFNb for 48h;
(B) Unstimulated A549 cells cultured in DMEM for 48h.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.