# Active Interferon Beta (IFNb)

*Catalog#:PEV12283*

## 概述（Summary）

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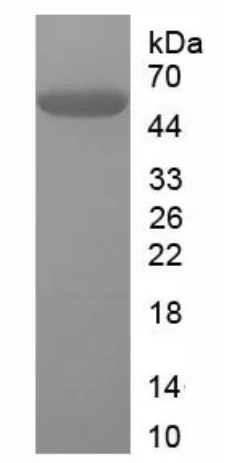
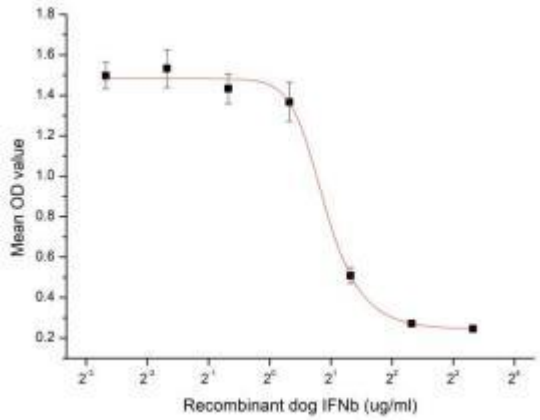
|---|---|
| **别称（Alternative Names）** | IFNB1; IFN-B; IFB; IFF; IFNB; Interferon Beta 1 Fibroblast |
| **纯度（Purity）** | Greater than 97% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | Please contact with the lab for this information |
| **蛋白构建（Construction）** | 【Ala21-Asn186】 |
| **Accession #** | B6E116 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Canis familiaris; Canine (Dog) |
| **预测分子量（Predicted MW）** | 50.1 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）

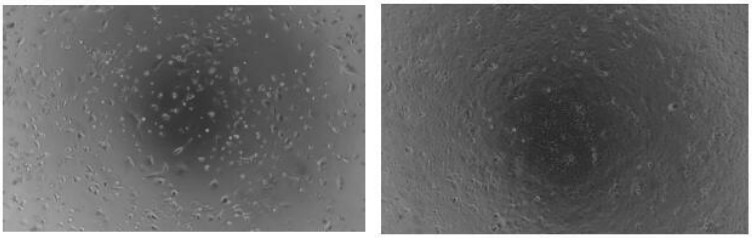


Greater than 97% as determined by reducing SDS-PAGE.

## 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 overnight, then the medium was replaced with various concentrations of recombinant dog IFNb diluted with 5% serum standard DMEM. After incubated for 72h, 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 72h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8 ) assay after incubation with recombinant dog IFNb for 72h. The result was shown in Figure 2. It was obvious that IFNb significantly decreased cell viability of A549 cells. The EC50 of recombinant dog IFNb is 1.86 µg/ml. Figure 2. Cell apoptosis of A549 cells after stimulated with recombinant dog IFNb.



A B

Figure 1. Cell apoptosis of A549 cells after stimulated with recombinant dog IFNb.
(A) A549 cells cultured in DMEM, stimulated with 2.5 ug/ml IFNb for 72h;
(B) Unstimulated A549 cells cultured in DMEM for 72h.

## 注意事项（Note）

For Research Use Only , Not for Diagnostic Use.