Active Interferon Gamma (IFNg)

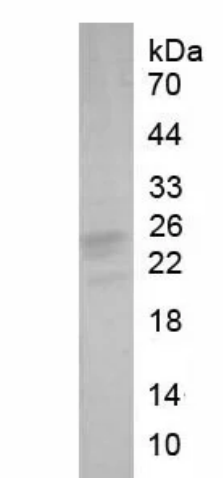
Catalog#:PHH12072

概述（Summary）

别称（Alternative Names）	IFN-G; IFG; IFI; INFr; IFN, Immune Interferon
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gln24-Gln166】
Accession #	P01579
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	18.4 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.
背景介绍（References）	Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation. Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation. Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription.

Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits. In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading. Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference. Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins B/CTSB, H/CTSH, and L/CTSL. Participates in the regulation of hematopoietic stem cells during development and under homeostatic conditions by affecting their development, quiescence, and differentiation.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

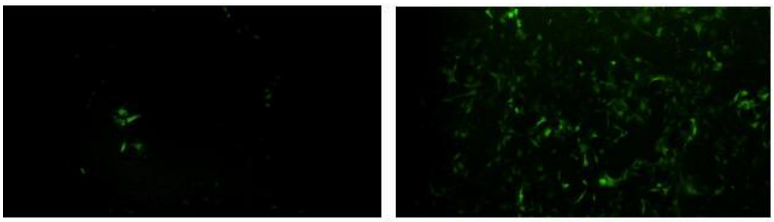


Figure 1. HUVEC cells infect by HIV-GFP lentiviral.

(A) HUVEC cells cultured with 0.01 μg/ml recombinant human IFN-g;
(B) HUVEC cells cultured without recombinant human IFN-g

IFN-g is a dimerized soluble cytokine that is the only member of the type II class of interferons. The importance of IFNg in the immune system stems in part from its ability to inhibit viral replication directly and most importantly from its immunostimulatory and immunomodulatory effects. The activity of recombinant human IFN-g measuerd by inhibit HIV-1-GFP lentiviral infection HUVEC cells. HUVEC cells were seeded into triplicate wells of 96-well plates at a density of 4,000 cells/well

with 10% serum standard DMEM , after the cells adhesion, repalce the medium with various concentrations of recombinant human IFN-g, incubate overnight at 37℃. Then suction out the DMEM medium, add lentiviral particles 100 µl to each well, incubate 24h at 37℃, change fresh 10% serum standard DMEM to the well, continuing incubate at 37℃for 96h. The results observed by inverted microscope was shown in Figure1. The ED50 for this effect is 0.01 ug/ml

注意事项（Note）

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