

Interferon Gamma (IFNg) Active Protein | IFNg active protein

Active Interferon Gamma (IFNg)

CATALOG # AAA146603	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Interferon Gamma (IFNg); Active Interferon Gamma (IFNg); IFN-G; IFG; IFI; INFr; IFN; Immune Interferon; IFNg active protein

PRODUCT SPECIFICATIONS

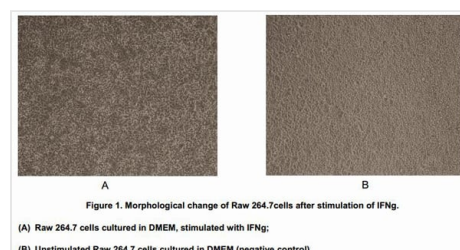
Host	E Coli
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	156
Applicable Applications for IFNg active protein	Activity Assay, Cell Culture
Fragment	Gln23~Cys156
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Organism Species	Rat
Isoelectric Point	9.3
Usage	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES

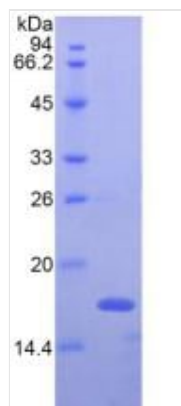
Table 1. ELISA detection of iNOS expression from RAW 264.7 cells stimulated by IFNg.

Sample (cell lysates of Raw 264.7 cells)	O.D. value	Corrected	Concentration of iNOS (ng/mL)
stimulated with IFN-γ (10ng/mL)	3.31	3.22	40.97
unstimulated	0.37	0.28	3.66

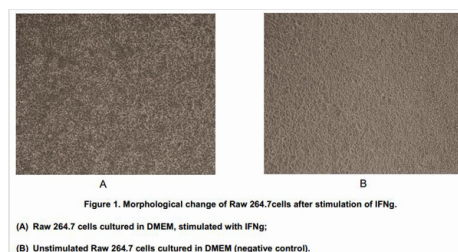
Application Data



Application Data



SDS-PAGE



Activity

Interferon gamma (IFN γ) is a dimerized soluble cytokine that is the only member of the type II class of interferons. The importance of IFN γ in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. It has been reported that IFN- γ promotes production of inducible Nitric Oxide Synthase (iNOS) in macrophages as an important activator. After stimulated with IFN- γ , morphological changes will occur in murine macrophage cell line (Raw 264.7 cells), and inducible nitric-oxide synthase (iNOS) in the cells will increase. Raw 264.7 cells were incubated in DMEM with IFN- γ (10ng/mL) for 24h, then cells were observed by inverted microscope and iNOS in cell lysates was detected by ELISA. Effect of IFN- γ on morphological change of Raw 246.7 cells was shown in Figure 1.

ADDITIONAL INFORMATION

Product Categories/Family for IFN γ active protein	Active Protein
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NCBI AND UNIPROT INFORMATION

NCBI GI #	20302055
NCBI GeneID	25712
NCBI Accession #	NP_620235.1
NCBI GenBank Nucleotide #	NM_138880.2
UniProt Accession #	P01581
Molecular Weight	16.8kDa; 16kDa
NCBI Official Full Name	interferon gamma
NCBI Official Synonym Full Names	interferon gamma
NCBI Official Symbol	Ifng
NCBI Official Synonym Symbols	IFNG2
NCBI Protein Information	interferon gamma
UniProt Protein Name	Interferon gamma
UniProt Gene Name	Ifng
UniProt Synonym Gene Names	IFN-gamma

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.