

Active Recombinant Human IFNG

Cat. No. IFNG-510H Lot. No. (See product label)

SPECIFICATION

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| Product Overview | Recombinant Human Interferon gamma /IFNG Protein, HEK293 Expressed (rhIFNG) Gln 24 - Gln 166 (Accession # AAH70256) was produced in human 293 cells (HEK293). |
| Species | Human |
| Source | HEK293 |
| ProteinLength | 24-166 a.a. |

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| Description | <p>Interferon-gamma (IFN-γ/IFNG) is a dimerized soluble cytokine that is the only member of the type II class of interferon. This interferon was originally called macrophage-activating factor, a term now used to describe a larger family of proteins to which IFN-γ belongs. IFN-gamma has been used in a wide variety of clinical indications. Interferon-gamma (IFNγ) is a central regulator of the immune response and signals via the Janus Activated Kinase (JAK)-Signal Transducer and Activator of Transcription (STAT) pathway. Interferon gamma has broader roles in activation of innate and adaptive immune responses to viruses and tumors, in part through upregulating transcription of genes involved in cell cycle regulation, apoptosis, and antigen processing/presentation. Despite this, rodent and human trophoblast cells show dampened responses to IFNG that reflect the resistance of these cells to IFNG-mediated activation of major histocompatibility complex (MHC) class II transplantation antigen expression.</p> |
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| Predicted N Terminal | Gln 24 |
| Form | Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose are added as protectants before lyophilization. |
| Bio-activity | Determined by a cytotoxicity assay using HT-29 cells. The ED50?< 0.05="" ng/ml,="" corresponding="" to="" a="" specific="" activity="" of="" >2X10^7?Unit/mg. |
| Molecular Mass | rhIFNG, contains no "tag", has a calculated MW of 16.8 kDa. DTT-reduced Protein migrates as 25 kDa due to glycosylation. |
| Endotoxin | Less than 1.0 EU per µg of the rhIFNG by the LAL method. |
| Purity | >93% as determined by SDS-PAGE. |
| Storage | Avoid repeated freeze-thaw cycles. No activity loss was observed after storage at: In?lyophilized state?for?1 year?(4 centigrade-8 centigrade); Afterreconstitution?under sterile conditions for?1 month?(4 centigrade-8 centigrade) or?3 months?(-20 centigrade to -70 centigrade). |

GENE INFORMATION

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| Gene Name | IFNG interferon, gamma [Homo sapiens] |
| Official Symbol | IFNG |
| Synonyms | IFNG; interferon, gamma; interferon gamma; IFN-gamma; immune interferon; IFG; IFI; |
| Gene ID | 3458 |

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| mRNA Refseq | NM_000619 |
| Protein Refseq | NP_000610 |
| MIM | 147570 |
| UniProt ID | P01579 |
| Chromosome Location | 12q14 |
| Pathway | ATF-2 transcription factor network, organism-specific biosystem; African trypanosomiasis, organism-specific biosystem; African trypanosomiasis, conserved biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; |
| Function | cytokine activity; interferon-gamma receptor binding; |

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