

## Active Recombinant Human IFNG, His-tagged

**Cat. No.** IFNG-8860H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human IFNG was produced in the endosperm tissue of barley grain ( <i>Hordeum vulgare</i> ).
<b>Species</b>	Human
<b>Source</b>	Hordeum Vulgare
<b>Description</b>	IFN-gamma, a type II interferon and an acid-labile interferon, is mainly produced by CD4 and CD8 T-lymphocytes and natural killer cells activated by antigens, mitogens or alloantigens. IFN-gamma shows no significant homology with IFN-beta or IFN-alpha. IFN-gamma has antiviral and antiparasitic activities and exhibits also immunoregulatory and proinflammatory activities. IFN-gamma induces cytokine production and promotes antigen presentation by up regulating the expression of MHC proteins as well as other antigen proteins. In contrast to other interferons, which are mostly antiviral, the main activity of IFN-gamma seems to be immunomodulatory. Human IFN-gamma is species-specific and is only biologically active in human and primate cells.
<b>Predicted N Terminal</b>	His
<b>Form</b>	Sterile filtered through a 0.2 µm filter. Lyophilized from PBS pH 7.2
<b>Bio-activity</b>	The bioactivity of recombinant human IFN-gamma was determined by its dose dependent cytostatic effect, in the presence of TNF-alpha, on HT-29 (human carcinoma) cells. The ED50 value for this batch of IFN-g is 0.12 ng/ml, corresponding

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to 8.5 x 10e6 U/mg specific activity.

**Molecular Mass**

Recombinant human IFN gamma contains 143 amino acids and a 16 a.a. Histidine-based tag for a total length of 159 a.a. and has a predicted molecular mass of 18.8 kDa. As of glycosilation, the recombinant protein migrates with an apparent molecular mass of 20-25 kDa in SDS-PAGE.

**Endotoxin**

Endotoxin level is less than 0.05EU/μg as measured by turbidimetric kinetic assay.

**Purity**

>95% by SDS-PAGE gel analysis.

**Storage**

The lyophilized protein is stable at room temperature for few weeks. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

**Reconstitution**

It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 μg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

## GENE INFORMATION

**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](#)

**mRNA Refseq**

[NM\\_000619](#)

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<b>Protein Refseq</b>	NP_000610
<b>MIM</b>	147570
<b>UniProt ID</b>	P01579
<b>Chromosome Location</b>	12q14
<b>Pathway</b>	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;
<b>Function</b>	cytokine activity; interferon-gamma receptor binding;

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