

## Recombinant Human IFN gamma Protein

**CAT. NO: R00393**

**Size: 100µg**

### Description

Interferon gamma (IFN $\gamma$ ) is a dimerized soluble cytokine that is the only member of the type II class of interferons. The existence of this interferon, which early in its history was known as immune interferon, was described by E. F. Wheelock as a product of human leukocytes stimulated with phytohemagglutinin, and by others as a product of antigen-stimulated lymphocytes or tuberculin-sensitized mouse peritoneal lymphocytes challenged with PPD. The resulting supernatants were shown to inhibit growth of vesicular stomatitis virus. IFN $\gamma$  is a cytokine that is critical for innate and adaptive immunity against viral, some bacterial and protozoal infections. IFN $\gamma$  is an important activator of macrophages and inducer of Class II major histocompatibility complex (MHC) molecule expression. The importance of IFN $\gamma$  in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. IFN $\gamma$  is produced predominantly by natural killer (NK) and natural killer T (NKT) cells as part of the innate immune response, and by CD4 Th1 and CD8 cytotoxic T lymphocyte (CTL) effector T cells once antigen-specific immunity develops.

### Amino Acid Sequence:

QDPYV KEAEN LKKYF NAGHS DVADN  
GTLFL GILKN WKEES DRKIM QSQIV  
SFYFK LFKNF KDDQS IQKSV ETIKE  
DMNVK FFNSN KKKRD DFEKL TNYSV  
TDLNV QRKAI HELIQ VMAEL SPAAK  
TGKRK RSQML FRG

**Source:** E. coli Gln24-Gly161

**Species:** human

**Purity:** >95%, by SDS-PAGE quantitative densitometry by Coomassie® Blue Staining.

**Molecular Weight:** 16.1KD

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstitute in ddH<sub>2</sub>O at 100 µg/mL.

**Endotoxin:** Less than 1 EU/µg of IFN $\gamma$  as determined by LAL method.

### Storage:

Lyophilized recombinant human Interferon gamma remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rhIFN $\gamma$  remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.