Interferon-γ (IFN-γ), human recombinant

CATALOG #:  
4116-20  20 µg  
4116-100  100 µg  
4116-1000  1 mg

SOURCE:  
E. coli

PURITY:  
>98% by SDS-PAGE and HPLC analysis  
Endotoxin level is <0.1 ng per µg of IFN-γ.

MOL. WEIGHT:  
16.9 kDa

FORMULATION:  
Lyophilized powder with no additive

RECONSTITUTION:  
Centrifuge the vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1 mg/ml.

STORAGE CONDITIONS:  
The lyophilized IFN-γ should be stored desiccated below 0°C. Reconstituted IFN-γ should be stored at working aliquots at -20°C. For long term storage, it’s recommend to add a carrier protein (0.1% HAS or BSA).

DESCRIPTION:  
IFN-γ is a lymphoid factor that possesses potent anti-viral activity. 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 (IFN gamma) 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 upregulation of 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. Recombinant human IFN-γ is a 16.9 kDa protein containing 144 amino acid residues.

BIOLOGICAL ACTIVITY:  
The ED₅₀ as determined in a viral resistance assay is < 0.05 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶ units/mg.

Lane 1 : Markers  
Lane 2: hr IFN-gamma (3.5 µg)  
Lane 3: hr IFN-gamma (7 µg)  
Lane 4: hr IFN-gamma (14 µg)

Human Recombinant IFN-gamma

RELATED PRODUCTS:
- Human CellExp™ Human Recombinant IFN-gamma (Cat # 7271-10)  
- IFN-A2, human recombinant (Cat # 7163-10, -50)  
- Human CellExp™ Human Recombinant IFN-alpha 2b (Cat # 6459-10, -50)  
- IFN-alpha 2a, human recombinant (Cat # 4594-20, -100, -1000)  
- IFN-alpha 2b, human recombinant (Cat # 4595-20, -100, -1000)  
- IFN-alpha 1, human recombinant (Cat # 4596-10, -100, -1000)  
- IFN-beta 1b, human recombinant (Cat # 4860-10, -50, -1000)  
- IFN-gamma, human recombinant (Cat # 4116-20, -100, -1000)  
- IFN-gamma, murine recombinant (Cat # 4117-20, -100, -1000)  
- IFN-gamma, rat recombinant (Cat # 4118-50, -100, -1000)  
- IFN-gamma Antibody (Cat # 5116-200)  
- IFN-gamma Antibody (Cat # 5117-100)  
- IFN-alpha Antibody (Cat # 5596-100)  
- IFN-alpha Antibody (Cat # 5595R-100)  
- IFN-alpha 2b Antibody (Cat # 5595-100)

FOR RESEARCH USE ONLY! Not to be used on humans.