Technical Data Sheet

Recombinant Murine Interferon-γ (rMu IFN-γ)

Murine Interferon γ

Interferon-gamma (IFN-γ, also known as Type II interferon or immune interferon) is a cytokine produced primarily by T-lymphocytes and natural killer cells. The protein shares no significant homology with IFN-β or the various IFN-α family proteins. Mature IFN-γ exists as non-covalently-linked homodimers. Human IFN-γ is highly species specific and is biologically active only in human and primate cells. IFN-γ was originally characterized based on its antiviral activities. The protein also exerts anti-proliferative, immuno-regulatory and pro-inflammatory activities and is thus important in host defense mechanisms. IFN-γ induces the production of cytokines, upregulates the expression of class I and II MHC antigens, Fc receptor and leukocyte adhesion molecules. It modulates macrophage effector functions, influences isotype switching and potentiates the secretion of immunoglobulins by B cells. IFN-γ also augments TH1 cell expansion and may be required for TH1 cell differentiation.

Catalog Number:	RC237-17
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 15.6 kDa, a single non-glycosylated polypeptide chain containing 134 amino acids.
Quantity:	20ug/100ug/1000μg
Purity:	>95% by SDS-PAGE and HPLC analyses.
Biological Activity:	Measured in an antiviral assay using L929 mouse fibrosarcoma cells infected with encephalomyocarditis (EMC) virus. The ED50 for this effect is typically 0.2-0.8ng/mL.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered solution in PBS, pH 7.4, containing 5% trehalose.
AA Sequence:	MHGTVIESLESLNNYFNSSGIDVEEKSLFLDIWRNWQKDGDMKILQSQIISFYLRLFEVLKD NQAISNNISVIESHLITTFFSNSKAKKDAFMSIAKFEVNNPQVQRQAFNELIRVVHQLLPESS LRKRKRSRC
Endotoxin:	Less than 1EU/μg of rMuIFN-γ as determined by LAL method.

20 Konrad Cres, Markham Ontario L3R 8T4 Canada
Tel: (905) 474 4493, (800) 313 7224 Fax: (905) 474 5794
Email: order@biobasic.com Web: www.biobasic.com

Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Usage:	This material is offered by Bio Basic Canada Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.