

PrimeGene Technical Data Sheet

Catalog Number:	1F6-06
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 16.7 kDa, a single non-glycosylated polypeptide chain containing 143 amino acids.
Quantity:	20 μ g/100 μ g/1000 μ g
AA Sequence:	QAAFFKEIEN LKEYFNASNP DVGDDGGLFL DILKNWKEDS DKKIISQIV SFYFKLFENL KDNQVIQKSM DTIKEDLFVK FFNSSTSKLE DFQKLIQIPV NDLKVQRKAI SELIKVMNDL SPKANLRKRK RSQNPFRGRR ALQ
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by an anti-viral assay using human HeLa cells infected with encephalomyocarditis (EMC) virus is less than 10.0 ng/ml, corresponding to a specific activity of > 1.0 \times 10 ⁵ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 2 \times PBS, pH 7.4, with 5 % trehalose.
Endotoxin:	Less than 0.1 EU/ μ g of rEqIFN- γ as determined by LAL method.
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 \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Equine Interferon-gamma

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 noncovalently-linked homodimers. IFN- γ was originally characterized based on its antiviral activities. The protein also exerts antiproliferative, immunoregulatory and proinflammatory 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. Additionally, IFN- γ augments TH1 cell expansion and may be required for TH1 cell differentiation. Equine IFN- γ shares 73 %~82 % amino acid sequence identity with bovine, canine, feline, and porcine IFN- γ and 42 %~64 % with cotton rat, human, murine, rat, and rhesus macaque IFN- γ .