

# Recombinant Porcine IFN-gamma

Catalog # FL128

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ $\mu$ g of rPoIFN- $\gamma$ protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Porcine
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as measured in anti-viral assays using human HeLa cells infected with encephalomyocarditis (EMC) virus is 0.15~0.80 ng/ml.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS, with 5 % (v/v) Trehalose, 0.02% (v/v) Tween-20, pH 5.0.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a 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 $\leq -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
Accession #	P17803 Gln24-Lys166
Amino acid sequence	QAPFFKEITILKDYFNASTSDVPNGGPLFLEILKNWKEESDKKIIQSQIVSFYFKFFEIFKDNQAIQRSMDVIKQDMFQRFLNGSSGKLNDFEKLKIPVDNLQIQRKAISELIKVMNDLSPRSNLRKRKRKRSQTMFQGQRASK
Molecular weight	Approximately 16.8 kDa, a single non-glycosylated polypeptide chain containing 143 amino acids.
Synonyms	Immune Interferon, type II interferon, T cell interferon, MAF
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^{\circ}\text{C}$ . Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, $-20$ to $-70^{\circ}\text{C}$ as supplied. 1 month, $2$ to $8^{\circ}\text{C}$ under sterile conditions after reconstitution. 3 months, $-20$ to $-70^{\circ}\text{C}$ under sterile conditions after reconstitution.
Precautions	Recombinant Porcine IFN-gamma is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

Interferon-gamma (IFN- $\gamma$ ), also known as Type II interferon or immune interferon, is a dimerized soluble cytokine that is critical for innate and adaptive immunity against viral, some bacterial and protozoal infections. It is produced primarily by CD4 and CD8 T lymphocytes as well as natural killer (NK) and natural killer T (NKT) cells. The primary role for IFN- $\gamma$  is the activation of macrophages to increase phagocytosis, tumoricidal properties, and intracellular killing of pathogens. IFN- $\gamma$  also increases expression of MHC antigens by macrophages and this facilitates antigen presentation to T cells. The recombinant porcine Interferon-gamma is a 16.8kDa protein consisting of 143 amino acid.

