

# Recombinant Porcine IFN- $\alpha$ 1b

Catalog # FL127

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/ $\mu$ g of rPoIFN- $\alpha$ 1b protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Porcine
Tag	Tag free.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 20 mM Tris-HCL, 300 mM NaCl, 0.02% (v/v) Tween-20, pH 8.5.
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 #	P49879 Cys24-Glu189
Amino acid sequence	CDLPQTHSLAHTRALRLLAQMRRISPFSCLDHRRDFGSPHEAFGGNQVQKAQAMALVHEMLQQTFLFSTEGSAAAWNES LLHQFYTGLDQQLRDLEACVMQEAGLEGTPLLEEDSIRAVRKYFHRLTLYLQEKSYSPCAWEIVRAEVMRSFSSSRNLQDRL RKKE
Molecular weight	Approximately 19.15 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.
Synonyms	Interferon alpha-2, Interferon alpha A, Type I interferon
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. 12 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- $\alpha$ 1b is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

IFN- $\alpha$ s are proteins secreted by leukocyte. They are mainly involved in innate immune response against viral infection. The IFN- $\alpha$  family has 13 subtypes and 23 different variants. The individual proteins have molecular masses between 19-26kDa and consist of proteins with lengths of 156-166 and 172 amino acids. All IFN- $\alpha$  subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Many IFN- $\alpha$  subtypes differ in their sequences at only one or two positions. Naturally occurring variants also include proteins truncated by 10 amino acids at the carboxy-terminal end. Interferon stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase. The recombinant porcine IFN- $\alpha$ 1 is a 19.15kDa protein consisting of 166 amino acid residues.

