

# Recombinant porcine IFN-alpha 1/IFNA1 protein

Catalog Number: ATGP4031

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

24-189aa

### UniProt No.

Q6VAB8

### NCBI Accession No.

NP\_999558.1

### Alternative Names

Interferon alpha-1, Interferon-alpha, IFN-alpha-1, IFNA1, IFN-ALPHA-1, IFN1@

## PRODUCT SPECIFICATION

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### Molecular Weight

20.2kDa (176aa)

### Concentration

1mg/ml (determined by Absorbance at 280nm)

### Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS - PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

IFN-alpha 1, also known as Interferon alpha-1, belongs to a family of cytokines with potent antiviral, antiproliferative and immunomodulatory properties. IFNs were originally discovered as molecules that could reduce the ability of a normal virus to infect cells, a process called viral interference. IFNs have been classified into two major types of IFNs, type I and type II, based on their interactions to a specific cell surface receptor. The

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type I IFNs bind to the interferon alpha receptor, which consists of two subunits, IFNAR1 and IFNAR2. The IFN- $\alpha$  proteins are produced mainly by plasmacytoid dendritic cells (pDCs). They are mainly involved in innate immunity against viral infection. It is also made synthetically as medication in hairy cell leukemia. Recombinant porcine IFN-alpha 1, fused to His-tag at C-terminus, was expressed in HEK293 and purified by using conventional chromatography techniques.

## Amino acid Sequence

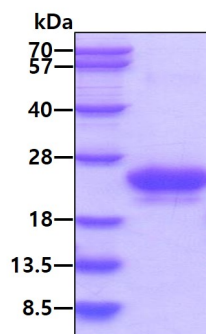
<DGSM>CDLPQT HSLAHTRALR LLAQMRRISP FSCLDHRRDF GSPHEAFGGN QVQKAQAMAL VHEMLQQTFFQ  
LFSTEGSAAA WNESLLHQFC TGLDQQLRDL EACVMQEAGL EGTPLLEEDS ILAVRKYFHR LTLYLQEKSYS PCAWEIVRA  
EVMRSFSSSR NLQDRLRKKE <HHHHHH>

## General References

Lengyel P (1982) Annual Review of Biochemistry. 51:252-282.  
Pestka S., et al, (1987) Annual Review of Biochemistry. 56:727-777.  
Isaacs A., et al, (1957) Biological Sciences. 147(927):258-267.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain