

RP01919

Leader in Biomolecular Solutions for Life Science



# Recombinant Human IFN-alpha 10 Protein

Catalog No.: RP01919 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	3446	P01566

### Tags

C-His

### Synonyms

IFNA10; IFN-alpha 10; IFNalpha C; IFN-alpha C; IFN-alpha-10; IFN-alphaC; interferon alpha-10; Interferon alpha-6L; Interferon alpha-C; interferon; alpha 10; LeIF C; MGC119878; MGC119879

## Product Information

Source	Purification
HEK293 cells	≥ 90% as determined by SDS-PAGE.

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

Interferons (IFN) are a family of cytokines with potent anti-viral, antiproliferative and immunomodulatory properties, classified based on their binding specificity to cell surface receptors. Human IFNA2 was originally cloned in the early '80s and now more than a dozen closely related IFN alpha subtypes have been identified in both the human and mouse genome, each sharing about 80% amino acid (aa) sequence homology. Structurally, type I IFNs belong to the class of five helical bundle cytokines, with the IFNA subtypes containing 2 conserved disulfide bonds. Mature human IFNA10 shares 61% aa sequence identity with mouse IFNA7. The type I IFNs bind to the interferon alpha receptor (IFNAR), which consists of two subunits: IFNAR1 (alpha-subunit) and IFNAR2 (beta-subunit). Individual IFNA subtypes are known to display unique efficacies to viral protection, and IFNA10 has been shown to be a strong inducer of IFN-stimulated genes and anti-viral protection. Additionally, IFNA10 exhibits weak anti-viral effects against SARS-CoV-2.

## Basic Information

### Description

Recombinant Human IFN-alpha 10 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Cys24-Asp189) of Human IFN-alpha 10/IFNA10 (Accession #NP\_002162.1) fused with His tag at the C-terminus.

### Bio-Activity

Measured in a cell cytotoxicity assay using TF-1 cells. The ED<sub>50</sub> for this effect is 0.26 ± 1.04 ng/mL, corresponding to a specific activity of 9.62 × 10<sup>3</sup> - 3.85 × 10<sup>6</sup> units/mg.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

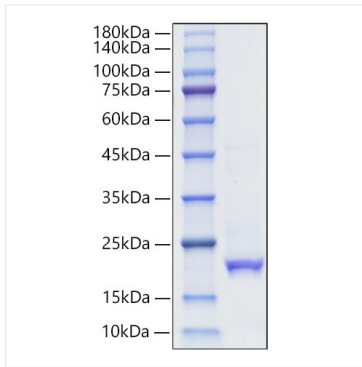
For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

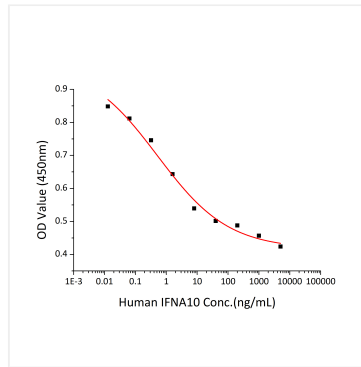
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

## Validation Data



Recombinant Human IFN-alpha 10 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human IFN-alpha 10/IFNA10 was measured in a cell cytotoxicity assay using TF-1 cells. The  $ED_{50}$  for this effect is 0.26  $\square$  1.04 ng/mL, corresponding to a specific activity of  $9.62 \times 10^5 \sim 3.85 \times 10^6$  units/mg.