

# Recombinant Human IFN- $\alpha$ 1/13(Q114A) Protein

Catalog No.: RP00011 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3439	P01562

### Tags

C-His

### Synonyms

IFNA1;IFL;IFN;IFN-ALPHA;IFN-alphaD;IFNA13;IFNA

## Product Information

Source	Purification
<i>E. coli</i>	> 97% by SDS-PAGE.

### Endotoxin

< 0.1 EU/ $\mu$ g of the protein by LAL method.

### Formulation

Lyophilized from a 0.22  $\mu$ m filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### 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.

## Background

IFNA1, also known as IFN- $\alpha$  and IFNA, belongs to the alpha/beta interferon family. Interferons (IFNs) are proteins made and released by host cells in response to the presence of pathogens such as viruses, bacteria, parasites or tumor cells. Leukocyte interferon is produced predominantly by B lymphocytes. Immune interferon is produced by mitogen- or antigen-stimulated T lymphocytes. IFNA1 is produced by macrophages and has both anti-viral and immunomodulatory activities on target cells.

## Basic Information

### Description

Recombinant Human IFN- $\alpha$  1/13(Q114A) Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Cys24-Glu189 (Ala114)) of human IFNA1 (Accession #NP\_076918.1) fused with an initial Met at the N-terminus and a 6xHis tag at the C-terminus.

### Bio-Activity

Measured by its ability to stimulate GBP2 expression in 293T human embryonic kidney cells. 0.1-1 ng/mL of Recombinant Human IFNA1 can effectively stimulate GBP2 expression. Measured by its ability to stimulate human colon adenocarcinoma cells (Caco-2 cells). 10 ng/ $\mu$ L of Recombinant Human IFN- $\alpha$  1/13(Q114A) can upregulate the expression of MDA5.

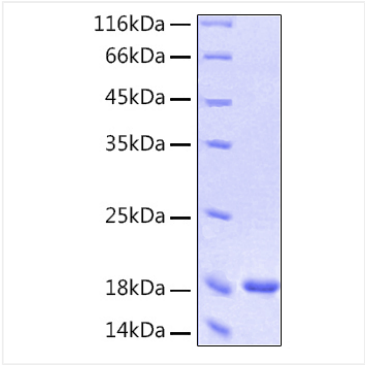
### Storage

Store the lyophilized protein at -20°C to -80°C for long term. 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.

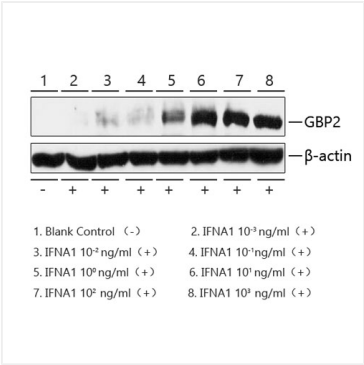
## Contact

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

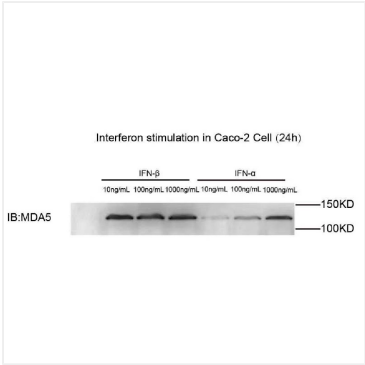
Validation Data



Recombinant Human IFN-alpha 1/13(Q114A) Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 18 kDa.



Active Recombinant Human IFNA1 stimulates GBP2 expression in 293T human embryonic kidney cells. 0.1-1ng/mL of Recombinant Human IFNA1 can effectively Stimulating GBP2 expression.



Active Recombinant Human IFN-alpha 1/13(Q114A) stimulates human colon adenocarcinoma cells (Caco-2 cells). 10 ng/ $\mu$ L of Recombinant Human IFN-alpha 1/13(Q114A) can upregulate the expression of MDA5. (Customer Feedback Data)