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

Catalog No.: RP00011 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot <I>E. 3439 P01562 coli</I>

### Tags

C-His

#### **Synonyms**

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

#### **Product Information**

Source Purification

<I>E. coli</I> ≥ 95 % as determined by SDS-PAGE.

#### **Endotoxin**

 $< 0.1 \; \text{EU/}\mu\text{g}$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### Contact

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# **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 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 6×His 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 Stimulating GBP2 expression.|2.Measured by its ability to stimulate human colon adenocarcinoma cells (Caco-2 cells). 10 ng/µL of Recombinant Human IFN-alpha 1/13(Q114A) can upregulate the expression of MDA5.

#### 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

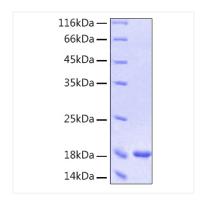
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at  $2-8^{\circ}$ C for up to 1 week.

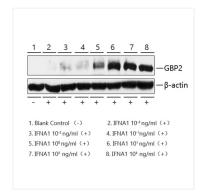
Avoid repeated freeze/thaw cycles.

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

# **Validation Data**



Recombinant Human IFN-alpha 1/13(Q114A) Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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.