

## Recombinant Human Interferon, Alpha 2, His-tagged

Cat. No. IFNA2-17H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human Interferon Alpha 2a produced in Plant is a single, glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19 kDa. The Interferon-2a contains affinity 6xHis tag on C-terminus. The IFN-A2a is purified by proprietary chromatographic techniques.
<b>Species</b>	Human
<b>Source</b>	Nicotiana Sp.
<b>Description</b>	IFN-alpha is produced by macrophages and has antiviral activities. Interferon stimulates the production of two enzymes: protein kinase and an oligoadenylate synthetase.
<b>Amino Acid Sequence</b>	The sequence of the first twelve N-terminal amino acids was determined and was found to be Cys-Asp-Leu-Pro-Gln-Thr-His-Ser-Leu-Gly-Ser-Arg.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	Greater than 99.0% as determined by both: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
<b>Formulation</b>	Lyophilized, containing 50% SDS.
<b>Solubility</b>	It is recommended to reconstitute the lyophilized Interferon-alpha 2a in sterile 18MΩ-cm H <sub>2</sub> O not less than 100g/ml, which can then be further diluted to other aqueous

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

solutions.

**Biological Activity**

The specific activity was determined by a quantitative gene report bioassay using human Type I interferon-sensitive cells. Compared with bacterial derived recombinant IFN- $\alpha$  2a, assayed in the same conditions, plant derived IFN- $\alpha$  2a showed  $6.1 \times 10^8$  Units/mg in reference to a viral resistance assay using bovine kidney MDBK cells.

**Storage**

Lyophilized Interferon alpha 2a although stable at room temperature for 3 weeks, should be stored desiccated below  $-18^{\circ}\text{C}$ . Upon reconstitution IFN- $\alpha$  2a should be stored at  $4^{\circ}\text{C}$  between 2-7 days and for future use below  $-18^{\circ}\text{C}$ . For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## GENE INFORMATION

**Gene Name**

IFNA2 interferon, alpha 2 [ [Homo sapiens](#) ]

**Synonyms**

IFNA2; Interferon, Alpha 2; IFNA; INFA2; MGC125764; MGC125765; Interferon alpha A; Alpha-2a interferon; Interferon alpha 2b; OTTHUMP00000021143; Interferon alpha-A; LeIF A; Interferon, alpha-2

**Gene ID**

[3440](#)

**mRNA Refseq**

[NM\\_000605](#)

**Protein Refseq**

[NP\\_000596](#)

**MIM**

[147562](#)

**UniProt ID**

[P01563](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Chromosome  
Location**

9p22

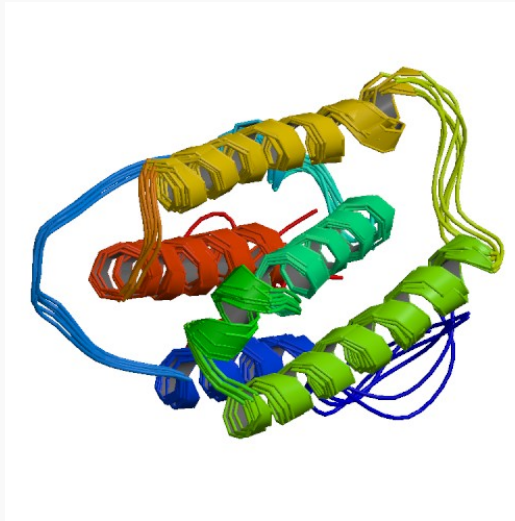
**Pathway**

Autoimmune thyroid disease; Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Natural killer cell mediated cytotoxicity; RIG-I-like receptor signaling pathway; Regulation of autophagy; Toll-like receptor signaling pathway; Antigen processing and presentation

**Function**

cytokine activity; interferon-alpha/beta receptor binding

**PDB rendering based  
on 1itf.**



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA