

## 32-1313: IFN $\alpha$ 2a Plant Recombinant Protein

**Alternative Name :** Leukocyte interferon,B cell interferon,Type I interferon,IFNA2,IFN- $\alpha$  2a.

### Description

Source : Nicotiana Sp.Plant. Interferon Alpha Human 2a Recombinant produced in Plant is a single, glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19 kDa.The Interferon- $\alpha$  2a contains affinity 6xHis tag on C-terminus.The IFN-A 2a is purified by proprietary chromatographic techniques. IFN- $\alpha$  is produced by macrophages and has antiviral activities. Interferon stimulates the production of two enzymes: protein kinase and an oligoadenylate synthetase.

### Product Info

<b>Amount :</b>	25 $\mu$ g
<b>Purification :</b>	Greater than 99.0% as determined by both:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	Lyophilized, containing 50% SDS.
<b>Storage condition :</b>	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.
<b>Amino Acid :</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.

### Application Note

It is recommended to reconstitute the lyophilized Interferon- $\alpha$  2a in sterile  $18\text{M}\Omega\text{-cm}$  H<sub>2</sub>O not less than  $100\text{ }\mu\text{g/ml}$ , which can then be further diluted to other aqueous solutions. 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  $6.1\text{ }\text{\AA}\text{---}108$  Units/mg in reference to a viral resistance assay using bovine kidney MDBK cells.

