



Product Datasheet

Product Name	Interferon Alpha 2a Human Recombinant, Tobacco
Cata No	CB501277
Source	<i>Nicotiana Sp.Plant</i>
Synonyms	Leukocyte interferon, B cell interferon, Type I interferon, IFNA2, IFN- α 2a.

Description

IFN-alpha is produced by macrophages and has antiviral activities. Interferon stimulates the production of two enzymes: protein kinase and an oligoadenylate synthetase.

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-a 2a contains affinity 6xHis tag on C-terminus.

The IFN-A 2a is purified by proprietary chromatographic techniques

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

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-a 2a, assayed in the same conditions, plant derived IFN-alpha 2a showed 6.1×10^8 Units/mg in reference to a viral resistance assay using bovine kidney MDBK cells.

Purity

Greater than 99.0% as determined by both:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

Lyophilized, containing 50% SDS.

Reconstitution

It is recommended to reconstitute the lyophilized Interferon-alpha 2a in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interferon alpha 2a although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$ C. Upon reconstitution IFN-alpha 2a should be stored at 4 $^{\circ}$ C between 2-7 days and for future use below -18 $^{\circ}$ C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.