



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet Recombinant Human Interferon-alpha 1a

Catalog No.
228-10815

Source
Escherichia Coli.

Synonyms

Interferon-alpha 1a, IFN-a 1a, IFN alpha 1a.

Introduction

At least 23 different variants of IFN-alpha are known. The individual proteins have molecular masses between 19-26 kDa and consist of proteins with lengths of 156-166 and 172 amino acids. All IFN-alpha subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Many IFN-alpha subtypes differ in their sequences at only one or two positions. Naturally occurring variants also include proteins truncated by 10 amino acids at the carboxy-terminal end.

Description

Interferon-alpha 1a Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19.4 kDa.

The Interferon-alpha 1a contains Valine residue at position 114.

The IFN-a 1a is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a (1 mg/ml) solution in containing 1X PBS pH-7.4.

Purity

Greater than 95.0% as determined by

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Solubility

It is recommended to reconstitute the lyophilized IFN alpha 1a in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Stability

Lyophilized Interferon alpha 1a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFN-alpha 1a should be stored at 4°C between 2-7 days and for future use below -18°C.

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

Please prevent freeze-thaw cycles.

Biological Activity

The specific activity as determined in a viral resistance assay was found to be 1 x 100,000,000 IU/ mg.

Amino Acid Sequence

CDLPETHSLD NRRTLMLLAQ MSRISPSSCL MDRHDFGFPO EEFDGNQFQK
APAISVLHEL IQQIFNLFTT KDSSAAWDED LLDKFCTELY QQLNDLEACA
MQEERVGETP LMNVDSILAV KKYFRRITLY LTEKKYSPCA WEVVRAEIMR
SLSLSTNLQE RLRRKE.

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