

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IFN- $\alpha$ 2a, Human

Catalog Number: BK0078-10 $\mu$ g

Source: Escherichia coli.

Quantity: 10 $\mu$ g

### Description:

Interferon-Alpha 2a (IFN-Alpha 2a), Human produced by leukocytes is a member of Interferon family. IFN-alpha is mainly involved in innate immune response against a broad range of viral infections. IFN-alpha 2 has three acid stable forms (a,b,c) signaling through IFNAR2. IFN-alpha 2a shares 99.4% , 98.8% aa sequence identity with IFN-alpha 2b and 2c respectively. IFN-alpha contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity. Recombinant Interferon-Alpha 2a (IFN-Alpha 2a), Human produced in E.coli is a single non-glycosylated polypeptide chain containing 165 amino acids. A fully biologically active molecule, rhIFN-Alpha has a molecular mass of 19.2kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

19.2kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE and HPLC analyses.

### Biological Activity:

ED50 < 0.1 ng/ml, measured by a cytotoxicity assay using TF-1 Cells, corresponding to a specific activity of > 1.0 $\times$  10<sup>7</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

CDLPQTHSLGSRRTLMLLAQMRKISLF-  
SCLKDRHDFGFPQEEFGNQFQKAETIPVLHEM-  
IQQIFNLFSTKDSSAAWDETLLDKFY-  
TELYQQLNDLEACVIQGVGVTTETPLMKED-  
SILAVRKYFQRITLYLKEKKYSPCAWEV-  
VRAEIMRSFSLSTNLQESLRSKE

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant human Interferon-Alpha 2a (rhIFN-Alpha 2a) remains stable up to 6 months at -80  $^{\circ}$ C from date of receipt. Upon reconstitution, rhIFN-Alpha 2a should be stable up to 2 weeks at 4  $^{\circ}$ C or up to 3 months at -20  $^{\circ}$ C.

### Usage:

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