

## **DATASHEET** Version 20181206

## IFN-α 2b, Human

Cat. No.: Z03002-1

**Size**: 1.0 mg

**Synonyms**: Interferon alpha 2b, IFNA, INFA2, MGC125764. MGC125765

## **Description:**

Interferon-Alpha 2b (IFN-Alpha 2b) 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 2b shares 99.4% aa sequence identity with both IFN-alpha 2a and 2c. IFN-alpha contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity.

Recombinant human Interferon-Alpha 2b (rhIFN-Alpha 2b) produced in *E.coli* is a single non-glycosylated polypeptide chain containing 165 amino acids. A fully biologically active molecule, rhIFN-Alpha 2b has a molecular mass of 19.2kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

## **Amino Acid Sequence:**

00001 CDLPQTHSLG SRRTLMLLAQ MRRISLFSCL KDRHDFGFPQ 00041 EEFGNQFQKA ETIPVLHEMI QQIFNLFSTK DSSAAWDETL 00081 LDKFYTELYQ QLNDLEACVI QGVGVTETPL MKEDSILAVR 00121 KYFQRITLYL KEKKYSPCAW EVVRAEIMRS FSLSTNLQES 00161 LRSKE Source: E. coli Species: Human

**Biological Activity**:  $ED_{50} < 0.05$  ng/ml, measured by a cytotoxicity assay using TF-1 Cells, corresponding to a specific activity of  $> 2.0 \times 10^7$  units/mg.

**Molecular Weight**: 19.2kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

**Reconstitution**: Reconstituted in  $ddH_2O$  at 100  $\mu g/ml$ .

Purity: > 95% by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: < 0.2 EU/µg, determined by LAL method.

**Storage**: Lyophilized recombinant human Interferon-Alpha 2b (rhIFN-Alpha 2b) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIFN-Alpha 2b should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.